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Special Features

in this

Issue

Control of Codling Moth
Interstate News and Notes
Market Grower Section
Citrus, Dried and Canned Fruit Notes
Breeding New Fruit Tree Varieties
Apples and Pears in Cool Storage
Federal Acquisition of Apples and Pears

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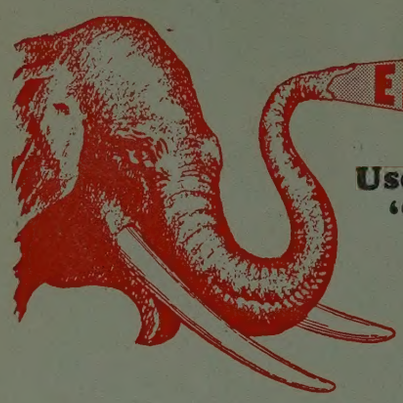

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NEW ZEALAND.

Problems Confronting the Apple and Pear Industry.

Government's Offer Rejected by Growers.

AS A RESULT of an offer made by the New Zealand Minister of Marketing, the Hon. W. Nash, to purchase 1,000,000 cases of export Apples at 6/9 per case, f.o.b., that money to be pooled with the returns from local sales, a series of meetings have been held throughout the Dominion rejecting the offer.

Many resolutions have been put forward. They include the paying for fruit on a sliding scale with a minimum price of 7/6 a case to the grower at the assembly point (or its equivalent f.o.b.), and that the local market be left free; that the Government take over the marketing of the fruit production of the Dominion; that the Government should purchase 1,500,000 cases at not less than 6/6 a standard bushel case; in the event of shipping facilities not being sufficient to cope with the 1,500,000 cases which should be purchased by the Government, then any surplus should be withheld from the local market and free distribution should be made to schools and institutions.

The Government then made an offer of 7/- a case f.o.b. for a million cases, and, subject to the approval of Cabinet, provide £10,000 for advertising. In the event of the fruit sold overseas being marketed at a profit to the Government, then would be paid into a pool a sum to compensate for the extent to which local sales fell short. If, after doing this, there was still a profit on the overseas sales, any surplus would be paid to the credit of the fruit industry.

In a statement, the N.Z. Fruit Board said that these terms were not acceptable to the industry, as 7/- f.o.b. did not give any definite figure which could be regarded as a net return from the Government purchase, and would leave 2,500,000 cases to be disposed of in N.Z. Growers had requested several times that a price be nominated at the assembly point, the Government then to take charge.

Advices are awaited as regards further developments.

New Zealand Crop Prospects

Apples and Pears Good

THE FOLLOWING REPORT is to hand from the New Zealand Director of the Horticultural Division regarding fruit crop prospects:

Auckland Province (Auckland, Hamilton and Tauranga).

Apples and Pears: Indications are for average crop. **Peaches, Nectarines and Apricots:** Light to average. **Plums:** Good crop. **Lemons:** Indicate light crop. **Poorman Oranges:** Fair promise. **Strawberries:** Medium, rain badly needed. **Tomatoes:** Fairly heavy plantings outdoor.

Hawke's Bay, Wellington and Taranaki Provinces.

Hawke's Bay.—Apples: Indications above average crop all varieties. **Pears:** Average crop with exception of W.B.C., Jos. and Coles, which showed light blossoming. **Peaches, Nectarines, Apricots and Cherries:** Average. **Plums, English and Japanese:** Heavy. **Strawberries:** Blossoming freely.

Gisborne.—Apples and Plums: Promise heavy crop. **Pears, Peaches, Apricots and Nectarines:** Average.

Wairarapa. — Apples: Sturmer, average. **C.O.P.:** Slightly below average; Jon., Dunn's and Del., light. **Pears:** Below average.

Wanganui. — Apples: C.O.P., Del. and Sturmer, average crop; Jon. and Dunn's, light to average. **Pears:** Below average. **Peaches, Nectarines and Quinces:** Average. **Lemons and Plums:** Light to average.

New Plymouth. — Apples: Below average. **Pears, Peaches and Lemons:** Very light. **Plums:** Light.

Palmerston North.—Apples: Heavy. **Pears, Peaches and Nectarines:** Light to average. **Plums, Cherries, Raspberries and Gooseberries:** Average. **Strawberries:** Heavy.

Nelson and Marlborough Provinces.

Nelson.—Apples: Indications Del. below average; Statesman, light; other varieties average to heavy. **Pears:** Most varieties showing well, but Winter Coles and W.B.C. rather light. **Peaches and Nectarines:** Good setting. **Apricots and Plums:** Rather light setting. **Cherries:** Good blossoming.

Marlborough.—Apples: C.O.P. and Dunn's, light; Del. and Dougherty, light to average; Jon. and Sturmer, average to heavy, other varieties average. **Pears and Stone Fruits:** Average setting. **Lemons:** Light.

Canterbury and Otago Provinces.

Canterbury.—Apples: Prospects of average crop with exception of Del., which are light. **Pears and Stone Fruits:** Good average.

Otago.—Apples: Considerable damage by frost in portions of Central Otago, results not yet available. **Pears:** Good average. **Stone Fruits:** Crop will probably be considerably reduced as result of frost damage, especially Apricots. **Cherries:** Promise good crop. **Small Fruits:** Good average.

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The Editor Extends *the* Season's Greetings to Readers

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AUSTRALIAN APPLE AND PEAR INDUSTRY.

War-time Problems.

Complete Co-operation Needed.

THE Australian Apple and Pear Board has issued a comprehensive statement to growers of Apples and Pears throughout Australia, pointing out the need for united and helpful action if the present problems are to be overcome. The statement embodies the article published in the last issue of the "Fruit World" in which the reasons were given for the action of the Federal Government in acquiring the 1940 crop (after March 1)—owing to the shortage of space for export fruit, and the problem of marketing over 5,000,000 cases of Apples and Pears normally exported. In addition to the information published last issue, it is now revealed that the Board requested the Commonwealth Government to purchase the crop at a basic price with guarantee of 3/- per bushel for Apples and 4/- per bushel for Pears. The Government stated they could not fulfil this request and finally announced that they were prepared to make advances on the fruit to be acquired on the basis of 2/- Apples and 3/- Pears, plus cost of preparation for market pending final realisation of the crop.

Registration and State Committees.

All growers must register. Occupiers of orchards of which not less than one acre is wholly or principally used for the growing of Apples and Pears must make application for registration. The date set for the return of the registration forms was November 30.

In applying for registration, growers are required to complete two forms. These forms are obtainable from the various State Committees. Owing to the unavoidable delay, it is realised that many growers will be unable to complete their forms by November 30, and in that event they are requested to attend to this matter as early as possible. Form A is for the registration of the grower's name and address; Form B is for growers to fill in details of varieties of Apples and Pears grown—trees bearing and non-bearing, production in 1937 and 1938, with estimates for 1940, and probable dates for picking.

The Board requests that in compiling form B, all varieties be included which are normally marketed prior to March, 1940, though not likely to be subject to acquisition (this is for statistical purposes only).

Further, the Board points out that the magnitude of the task is realised, but hopes—with the loyal co-operation of all—to achieve a liquidation of the crop that will prove a benefit, not only to the growers, but the industry as a whole, to the extent that at least the wheels can be kept in motion until we emerge into more peaceful times.

:: :: ::

UNDER the National Security Act, 1939, regulations dealing with Apple and Pear acquisition have been gazetted (Statutory Rules, No. 148). These regulations widen the existing powers of the Apple and Pear Board under the Apple and Pear Organisation Act, enabling the Board to have full authority, under Ministerial sanction, to acquire, sell and arrange for the disposal of all the Apples and Pears produced in the Commonwealth. The Board is empowered to license any person, firm, company or State authority to receive and deal with Apples and Pears on behalf of the Commonwealth.

Clause 11 reads "No person shall, on or after March 1, 1940, sell or offer for sale any Apples or Pears other than Apples or Pears which have been grown by a registered grower."

Clause 21 reads: "Any persons having any Apples or Pears the property of the Commonwealth in his possession or under his care, shall exercise **proper care and take all proper and reasonable precautions and do all things necessary to preserve and**

safeguard those Apples or Pears and to keep them free from any damage or deterioration whatsoever."

:: :: ::

State Committees.

Committees known as Apple and Pear Acquisition Committees have been set up in the several States as follow:—

New South Wales—Messrs. J. Holmes, L. J. Jenkins, H. V. Smith, E. E. Herrod, C. G. Savage.

Queensland—Messrs. Y. F. Jesser, A. Martin, B. Flewell Smith, J. C. Arkell, H. S. Hunter, E. L. Donaldson.

South Australia—Messrs. M. J. Vickers, P. R. B. Searcy, G. A. W. Pope, H. N. Wicks, L. J. Bishop.

Victoria—Messrs. J. B. Mills, W. Young, W. P. Hutchinson, A. S. Harrison, H. M. Wade, J. M. Ward.

Tasmania—Messrs. R. W. Humphreys, T. Burnaby, W. H. F. Calvert, D. E. Ryan, L. S. Taylor.

Western Australia—Messrs. H. W. Soothill, G. Parke, R. M. Carter, H. R. Powell, B. Mercer, F. W. Lantzke.

State Committees will deal with the following:—Assessment of crops; Cool storage position; Cases, paper and packing materials; Publicity; Eastern trade, and all other relevant matters.

Pools for Varieties.

It will be noted on the registration form that varieties are to be listed separately. It is proposed to classify varieties and conduct pools accordingly.

Cool Storage and Picking.

The several State Committees are attending to matters relative to cool storage capacity and packing shed facilities.

Matters of details regarding cases, cool storage and packing charges are receiving attention.

Interview With Retailers.

A deputation from the Melbourne and Metropolitan Retail Fruiterers' Association waited on the Victorian Apple and Pear Acquisition Committee recently. Many essential details were dealt with.

Retailers are firmly of the opinion that the sales of Apples and Pears can be substantially increased by delivering good quality standardised fruit to the public, backed up by judicious publicity on health lines. It is deemed advisable to instruct the public as to the varieties of Apples and Pears available, and the times when the fruit is at its best.

Retailers emphasised their desire for sale by count to be instituted, this matter was left to the retailers, but the desire for counts and size in the cases is recommended.

Efforts will be made to increase the trade in case and half-case lots to householders through the retail trade.

Meetings of Growers.

During November meetings were held in several fruit-growing centres in Victoria. Resolutions were carried in favor of increased advances. Considerable activity was manifested in the Metropolitan area, where many growers requested the right to continue their long-established practice of selling "from the tail of the waggon" in the Victoria Market. On the other hand, other growers recommended that work of assembling and selling the fruit be attended to by existing co-operative companies or cool store organisations.

Request for Exclusion of Pears.

Further, a considerable effort was made to have Pears excluded from the pool. Members of Parliament and growers,

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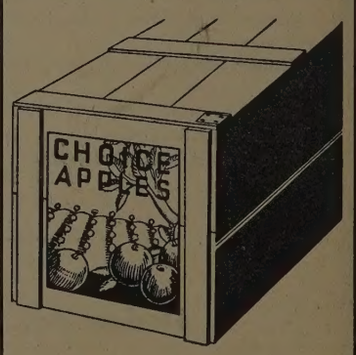

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representing Victoria, New South Wales, Queensland and South Australia, waited upon the Minister of Commerce (Senator McLeay).

Speakers said production of Pears in Victoria and New South Wales represented approximately four-fifths of the Australian crop. Growers representing such a large proportion of the production should not be prejudiced in the interests of producers of less than one-fifth of the crop. If left to make their own arrangements growers would be able to satisfactorily dispose of the crop.

Members representing West Australia and Tasmania, forming a second deputation, opposed the request. They stated that West Australia had not the advantage of canneries to absorb the crop, and neither that State nor Tasmania had the extensive local markets which were available to the other States. The exclusion of Pears from the scheme would be a grave injustice to the growers in West Australia and Tasmania. The Minister promised to consider the matter.

As the matter stands, however, the position is as set out in the regulations quoted (Statutory Rules, No. 148), in which Pears are included, together with the Apples, and the problem of the Victoria Market is being dealt with by the Victorian Apple and Pear Acquisition Committee.

PERSONAL.

On his return from abroad, **Mr. A. W. Palfreyman,** Chairman of the Henry Jones Co-operative Co. Ltd., said that South Africa exported large quantities of Oranges, Grapefruit, Grapes and Pears to London. Carriage on the railways for 1,200 miles was only 30/- a ton, and wages for native workers would be about 14/- a week for 50 hours or more.

Growers and canners were disappointed with efforts to grow Peaches in South Africa, but Apricots and Pears were produced in abundance.

South African canned Apricots were as good as, if not better than, Australia's, but Australian Pears were considered to be the best in the world.

Mr. C. D. Cameron, of Mildura, Victoria, who has just returned from America, states that Australian Oranges are superior to the Californian product, and draw a better price on the London market.

Congratulations are extended to **Mr. John Tully, Senr.,** of Doncaster, Victoria, who recently celebrated his 55th wedding anniversary. Mr. Tully states that he had been a fruitgrower all his life, and if he had to start all over again he would still be a fruitgrower.

Mr. Peter Malloch, a member of the Dried Fruits Export Board, has just returned from an official visit to Canada. Mr. Malloch states that Canadians are quite satisfied with our sundried fruits, and that conditions of trade were excellent. Of the 18,000 tons consumed in Canada last year, 16,000 tons were from Australia. The Australian product is better than the Californian, which is sulphur dried.

Mr. J. G. Aird has been appointed by the Victorian Apple and Pear Acquisition Committee to deal with cool storage matters, i.e., to investigate the facilities of the fruit cool stores in the State, and their varying charges, and to co-ordinate their activities.

VICTORIAN GROWERS ORGANISING.

Meetings of delegates from Victorian fruitgrowing Associations met during November and early December to draft a constitution for a combined association of growers of fresh deciduous fruits.

It is proposed the name should be the Victorian Apple and Pear Growers' Association.

It is proposed to set up Committees to deal with the several aspects of the industry—local marketing and export.

The provisional constitution gives power to register approved shippers, agents and buyers of fresh deciduous fruits.

PERSONAL.

Mr. Everard Ross, director of Messrs. H. Jones & Co. Ltd., Hobart and F. W. Moore & Co. Ltd., London, recently returned to Australia after an absence of five years. Mr. Ross was the London representative of the Australian Apple and Pear Council, in which capacity he rendered exceedingly valuable service. Mr. Ross was also the Council's delegate to the recent Empire Fruit Conference.

Mr. Ross stated that year after year the result of the growers' policy of improving their packs and giving the discriminating markets in Great Britain Apples and Pears of the types, sizes, and quality the British markets require was having more marked results. From contact with buyers and traders he believed that somewhat improved prices could have been looked for in the case of Tasmanian fruit. It was difficult to say that any large increase in the approximate amount of 4,900,000 cases sent to the English markets in recent years from Australia could have been anticipated.

Referring to the English Apple crop Mr. Ross said that the total marketed would reach a record. One grower had informed him that the English crop of marketable Apples would total 20,000,000 cases. English growers' marketing methods had improved vastly over the last five years. The grower previously referred to had also stated that 2,000,000 cases of the Bramley would be placed in gas stores, and that the marketing of this variety would extend from January to the middle or the end of May. This would thus coincide with what was regarded as the legitimate selling season of the Australian product.

From attempts made it would appear that British steamship lines would not be able to supply anything like the normal amount of tonnage for Australian fruit, and neutral countries were not willing to run their vessels to United Kingdom ports. Mr. Ross was of the opinion that even if the U-boat menace was successfully combated, freight rates would be very much on the high side. The European war was a tragedy for the fruit industry.

PURE FRUIT DRINKS.

Mr. W. M. Carne, Research Officer, Department of Commerce, Melbourne, has been giving a series of demonstrations to representative organisations and leaders of public opinion in relation to pure fruit drinks.

He displayed samples of pure Apple drinks manufactured in Victoria, Tasmania and N.S.W., also Apple drinks manufactured in England and on the Continent. All of the Apple drinks are in bottles. Pineapple juice from Queensland is in lacquered tins. Other fruit drinks include those made from Raspberry, Black Currant, etc.

These demonstrations have created considerable interest.

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Queensland: A.C.F. and Shirleys Fertilizers Ltd., Brisbane.
South Australia: George Wills & Co. Ltd., Gilbert House, Gilbert Place, Adelaide.
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CODLING MOTH CONTROL.

Spraying and Bandaging.

THE MOST FAVORABLE conditions for codling moth activity in Victoria occur in the warm inland districts as, for example, the Goulburn Valley irrigation areas where the problem of controlling codling in Pears is comparable with that of Apples in many other districts. The least favorable conditions are found in relatively cool districts such as Portland, Stanley, and the hill country of Gippsland.

Consideration has been given to these variations in the recommendations which follow. **The demonstration plots maintained in the various Apple and Pear growing districts of the State have shown convincingly that rigorous adherence to the principles outlined in these recommendations will enable heavy infestations to be reduced to a point where the loss of marketable fruit is negligible.**

The Victorian Department of Agriculture has issued the following advice:—

When—and Why—to Spray.

1. The Calyx Spray.

This spray is necessary to prevent infection of the fruit at the calyx and, therefore, the spray must be applied before the calyx closes. A thorough calyx spray will then ensure protection of the fruit at this point for the remainder of the season.

Apples: Apply spray when majority of petals have fallen. For varieties in which the petal fall extends over a week or more, two calyx sprays are recommended, the first when three-quarters of the petals have fallen, and the second eight to ten days later.

Pears: Advantage is taken of the fact that the calyx of Pears closes slowly and can be more effectively filled with arsenate of lead two to three weeks after petal fall.

2. The Cover Sprays.

In order to be most effective, the cover sprays must be timed according to moth activity. Codling moth activity varies because:—

(a) According to seasonal conditions and locality there may be one, two, or three, broods of moths, each of five to eight weeks' duration.

(b) Each brood reaches a maximum activity two to four weeks after its commencement.

(c) Egg-laying is profoundly affected by temperatures, the most favorable conditions for egg-laying being warm evenings when temperatures are in the vicinity of 60 deg. F.

By using lures, it is possible to determine easily and accurately, the activity of moths throughout the season. Lures are wide mouthed jars of about one pint capacity, containing a 10 per cent. solution of any one of the following materials—wine (sweet port type), Apple juice, cider, golden syrup or molasses. Lures should be checked twice a week. In over fifty properties throughout the State, lures are distributed under the charge of district Orchard Supervisors who use the information gained as a basis for their advice "when to spray."

You are advised to spray according to either your own set of lures or the advice distributed by the Orchard Supervisor in your district. This advice is distributed by means of lure charts placed in prominent positions, circulars distributed by the Supervisor or in co-operation with local organisations, press notices, broadcast advice, etc.

Schedules.

Arsenate of lead and Summer white oil emulsion (the latter is an egg-killing spray) are the only insecticides which can be recommended for the control of codling moth.

"A": Arsenate of lead throughout the season. Washing is essential to reduce the residue below the tolerance.

"B": Arsenate of lead until late December followed by Summer white oil until harvest. Washing not essential.

"C": The first one or two cover sprays, a combination of lead arsenate and white oil followed by white oil for the balance of the season.

Strength of Materials:

1. **Arsenate of Lead—**
   Paste, 5 lb. to 80 gallons water.
   Powder, 2½ lb. to 80 gallons water.
2. **White Oil—**
   1-1/3rd gallons, or 1 gallon to 80 gallons water, according to local spray advice.
3. **Combination Spray—**
   Arsenate of lead as above plus white oil 1: 80.

Spreaders:

For arsenate of lead sprays the addition of ½ lb. lime-casein spreader will reduce blotchiness, but will add very little, if anything, to the efficiency of the spray. For combination sprays in Schedule "C," 4 to 6 oz. of casein (not lime-casein) spreader per 80 gallon vat is recommended. If this is not done a tenacious residue will result. The latter addition will also reduce the risk of possible injury resulting from combination sprays.

The addition of small quantities of red or white oil to arsenate of lead sprays will usually result in a tenacious residue and this practice, therefore, should be confined to the earliest sprays or to canning Pear varieties.

Notes:—

1. When it is necessary to combine lime sulphur and lead arsenate, add the latter to the diluted lime sulphur and spreader immediately before spraying. For this combination spray, it is necessary to add either lime casein spreader, ½ lb. in 80 gallons, or 2 lb. slaked lime.

2. For the control of late or Summer black spot, 6 oz. each of bluestone and freshly slaked lime should be included in each 80 gallons of lead arsenate or white oil. Add lead arsenate to the diluted Bordeaux mixture.

3. Where seasonal conditions warrant the continued application of lime-sulphur sprays after petal-fall, care should be taken not to apply white oil within three weeks of a lime-sulphur spray, otherwise serious injury may result. In such circumstances, arsenate of lead should be used as cover sprays until the risk of injury has passed.

Codling Moth Tree Bandages.

Bandages cannot operate efficiently unless all alternative cover for grubs, such as loose and rough bark on the butts, debris in forks and on the ground around the tree, and cracks and crevices are eliminated as far as possible. Therefore, **scraping the butts** and a general clean-up in the Winter will serve the dual purpose of preparing the tree for the bands to be applied in November and detecting and destroying many over-wintering grubs.

THERE'S ONLY ONE WAY
TO KILL CODLIN..

Kill the grubs with arsenic (lead Arsenate) and kill the eggs with oil (Gargoyle WHITE Oil) using them together (they mix perfectly) to get the best results. It IS possible to keep your orchard absolutely free by spraying with this combination at the right times. You may have to spray 5 or 6 times, but it will give your trees immunity, and you bigger and better crops. Ask always for "Gargoyle" to be sure of getting the highest quality WHITE Spraying Oil on the market.

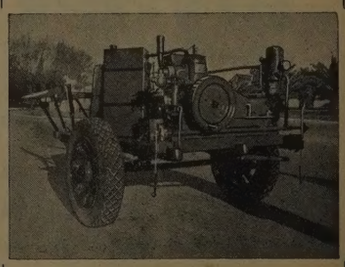
Protect your orchard with

VACUUM OIL COMPANY PTY. LTD.
(Incorporated in Australia)

Gargoyle WHITE Spraying Oil

SP92

— THE —
BAVE-U
POWER SPRAYER



All models can be fitted with pneumatic tyres at little extra cost.

Write for Particulars

Russell Burrows
Pty. Ltd.
Box Hill, E.11 Victoria

When placed in position care must be taken, especially with chemical bands, to see that the bandage is in contact with the bark at all points. Bag bandages must be examined every 10 to 14 days.

Bag bandages are to be preferred to chemical bands on Pears in Northern Victoria and are valuable wherever birds are troublesome in damaging chemical bands.

Bands should be in position no later than the last week of November and should be removed and destroyed in June or July of the following year. In Northern Victoria bands should be in position a fortnight earlier.

Recommendations:

1. Goulburn Valley and Rochester.

Use a heavy, thorough calyx spray, Schedule "A" with "timed" sprays and bag bandages.

2. Bendigo, Harcourt, Amphitheatre, Quantong and Pomonal.

Schedule "C" is most effective in these districts provided sprays are "timed" and either chemical or bag bandages are used. The Department cannot recommend the use of white oil for the Cleopatra variety and growers must be guided by their own experience with this variety.

3. Metropolitan, Mornington Peninsula, Geelong and Bacchus Marsh.

Use either Schedule "A" or "B." Either chemical or bag bandages should be used, but only where infection has been heavy need bandaging be used on Pears.

4. North East (Stanley), Gippsland, Diamond Creek, Hurstbridge and Portland.

Schedule "A" is recommended, although Schedule "B" may be used if late sprays are required. At Stanley, Portland, and the hilly districts of Gippsland, growers will be advised when late season sprays are required. In the hill districts of Gippsland and Portland, the calyx spray may be dispensed with.

Chemical bands are not necessary for Pears in these districts, but should be used for Apples unless damage by birds renders this impossible.

Growers who desire further advice on codling moth control, or any other horticultural advice, should communicate with the local Orchard Supervisor or write direct to the Superintendent of Horticulture, Department of Agriculture, Treasury Gardens, Melbourne, C.2.

CODLING MOTH SPRAYING.

Goulburn Valley Hints.

The Shepparton Fruitgrowers' Advisory Committee, in a circular to growers, under date November 16, states:—

For all trees sprayed prior to the rain on November 5, it is recommended that spraying be carried out again immediately. For trees sprayed since the rain great latitude can be allowed, but it should be noted that moth activity is usually at a minimum afer the second week in December until the next brood commences.

Banding.

Attention should now be given to the fixing of bag bands. It is recommended that to minimise the cost of inspection, only single thickness of bag be used. In a normal season grubs can be expected to enter the band from the third week in November, and it is essential that regular inspections be made at 10 to 14 day intervals, according to weather conditions.

PEACH RUST.

No signs of Peach Rust were evident at the end of November, nevertheless the present weather conditions are extremely favorable to its development.

As a preventive measure it is recommended that a spray of dry mix lime sulphur be applied immediately to all Peach trees where the spray was not applied at the "stocking" stage.

Where the first spray was applied, a second application can be delayed until the latter part of November. For the benefit of those not familiar with this spray, the following quantities are recommended:—25 lb. dry mix lime sulphur to 100 gallons of water.

APPLE JUICE.

Big Developments Abroad.

A recent report from overseas states that Switzerland is consuming 5,000,000 gallons of Apple juice annually, Germany 15,000,000 gallons, and America 7,000,000 gallons.

NEWS IN BRIEF.

The Shepparton Preserving Co. is paying an additional £1 per ton on the canning and pulp Peaches, Pears, and Apricots handled last season. The sum involved is £11,787. This is the second payment of this kind during the past few weeks, the full total involved being £23,574.

CODLING MOTH CONTROL.

Victorian Departmental Advices.

Mr. J. L. Provan, Senior Horticultural Instructor, Victorian Department of Agriculture, advises that in connection with the lure charts showing the weekly totals of Codling Moth catches in various districts the Orchard Supervisor records these catches weekly on the chart so that growers can observe for themselves the main periods of the peak flights of Codling Moth. Spray advice is also placed on these charts to guide the growers in the control of this pest. In addition, if any other fungous disease or insect pest appears to be prevalent, or is increasing in seriousness, then advice on the control of same is also included.

Growers are advised that lure charts are available at the following centres:—

Mornington Peninsula.—Red Hill Store, Somerville & Hastings Packing Sheds, Tyabb Cool Stores.

Metropolitan.—Ringwood, Croydon, Blackburn, E. Burwood, Wantirna, and Waverley Cool Stores; Doncaster, East Doncaster, and Donvale Post Offices.

Diamond Creek and Hurstbridge.—Panton Hills, Cottles Bridge, Hurstbridge, Diamond Creek, Strathewen and Wattle Glen Post Offices, and Hurstbridge Cool Store.

Gippsland.—Pakenham East and Upper Beaconsfield Post Offices, Bastow's Garage, Pakenham Upper, Bunyip Cool Stores, General Store, Officer.

Geelong and Bacchus Marsh.—Geelong Fruit Market, Wallington School, G. Anderson's Store (Bacchus Marsh).

Portland.—Office of McPherson & Hedditch.

Quantong, Pomonal, Amphitheatre.—Amphitheatre General Store, Quantong Fruitgrowers' Association; Elmhurst, Mt. Cole Creek, Pomonal South and Pomonal Post Offices.

Bendigo, Harcourt.—Harcourt Post Office.

Bamawm.—Lockington Packing Shed, Rochester, and Bamawm Ext. Post Offices.

Kyabram and Ardmona.—At offices of Kyabram Co-op. Co. Ltd., and Ardmona Fruit Products Co-op. Co. Ltd.

Shepparton.—S.P.C. office.

North East.—General Store and Hotel, Stanley; Hurdle Flat and Wandiligong P.O.

Wireless forecast services are also conducted by the Department of Agriculture as follows:—

Central:

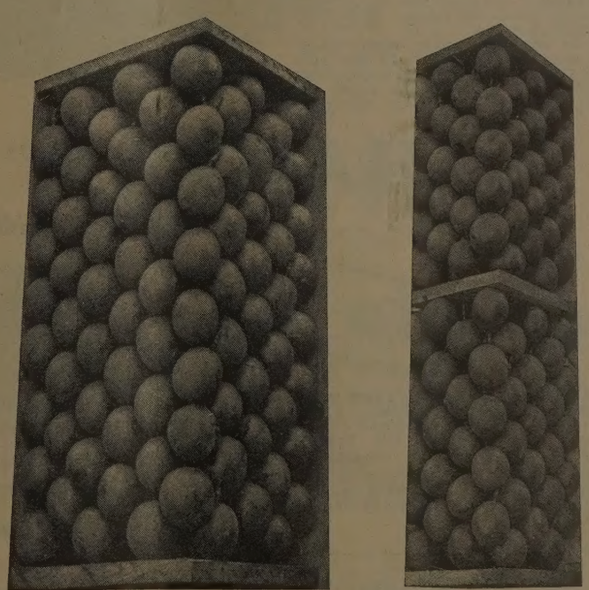
3UZ—"Man on the Land" session, Tuesdays and Fridays at 6.35 a.m.
Advice for all districts.

Provincial:

3GL Geelong—Mondays, 7.25-7.35 a.m.
Advice for Geelong and Mornington Peninsula.

3SR Shepparton—Broadcasts advice when required.
Ardmona, Kyabram, Shepparton and Rochester districts are co-ordinated for this advice.

3UL Warragul—Friday, 7 p.m.—Gippsland district.



Examples of packing Passionfruit in half dump and half long bushel case.
(Illus. by courtesy Vic. Dept. of Agriculture.)

PASSIONFRUIT.

Packing Chart Now Available.

A chart on packing Passionfruit has just been issued by the Department of Agriculture, Melbourne. These are available on application. The chart shows packing Passionfruit in the long bushel (26in. x 6in. x 14¼in.), half long bushel (26in. x 6in. x 7⅛in.), half dump bushel (18in. x 8-2/3in. x 7⅛in.), and half standard (18in. x 11½in. x 5¼in.).

POISON BAIT FOR CUT-WORMS.

From enquiries, it would appear that cut worms are prevalent, and thus the following poison bait formula, recommended by the Entomological branch of the N.S.W. Dept. of Agriculture, will undoubtedly prove useful in controlling the pest:

Paris green—1 lb.
Bran—24 lb.
Water—2½ gallons.
Salt—8 ounces.

Instead of Paris green, white arsenic or arsenite of soda (9 oz.) may be substituted, but the bait is then much less attractive and effective. Treacle (20 oz.) may be used instead of the salt, while the addition of some finely chopped Lemons to the water when mixing the mash renders the bait more attractive to the pest.

The bran and the Paris green (or white arsenic) should be thoroughly mixed while dry, and then made into a damp, crumbly mash with the water. If arsenite of soda is used, it should be dissolved in the water before mixing with the bran.

The mash can be spread along the rows of infested plants or broadcast through the crop, but in soil where cut-worms are known to be numerous already the bait should be broadcast over the area at the rate of 20 to 30 lb. to the acre several days before the crop is planted.

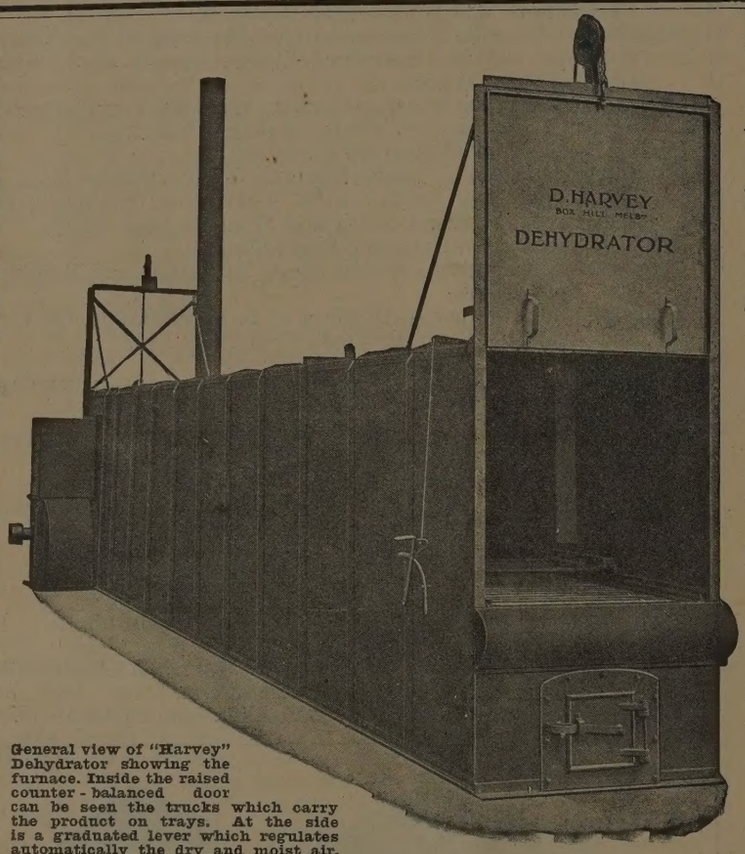
It must be remembered that the bait is poisonous, and should be kept out of reach of stock.

SOUTH AUSTRALIAN DRIED FRUITS.

A meeting of the South Australian Dried Fruits Board was held at Adelaide on November 20.

The revised home consumption quotas were approved. A complaint against a grower for alleged unlawful trading was set down for hearing at Renmark on November 23. The Governor in Council had upheld the Board's decision in refusing certain dealers' registrations at Coonwarra.

A request from a N.S.W. firm of packers to purchase ungraded S.A. Apricots was refused. A grant of £10 to the Royal Agricultural Society for awards in the cookery section was approved.



General view of "Harvey" Dehydrator showing the furnace. Inside the raised counter-balanced door can be seen the trucks which carry the product on trays. At the side is a graduated lever which regulates automatically the dry and moist air. The blower and stack are shown in the distance.

Fruitgrowers

THE

"Harvey" Air Re-Circulation Dehydrator

Solves the Problem of Marketing The Fruit Crop

SUCH AS APPLES, PEARS, PRUNES, APRICOTS, PEACHES, SULTANAS, Etc.

It is the best, cheapest, and most efficient type of dehydrator known. Used by all the most up-to-date Packing Houses and Sheds.

LARGE OUTPUT—
ECONOMICAL TO OPERATE

The Fruit is placed in one end and comes out at the other dried to Perfection.

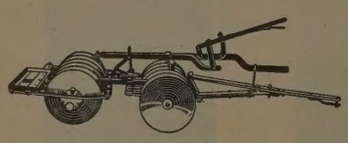
Grade Your Fruit with the "Harvey" Apple and Pear Graders.

Remove Spray with the "Harvey" New Horse Hair Belt Type Polishing Machine.

Citrus Growers and Packing Houses—We Build to Suit Your Requirements.

— "HARVEY" IMPLEMENTS —

MAKE GOOD WORK EASY



"HARVEY" PATENT OFFSET TANDEM DISC CULTIVATOR: Cultivates right up to the butts of the trees or vines while the Tractor is driven right out in the middle of the row.

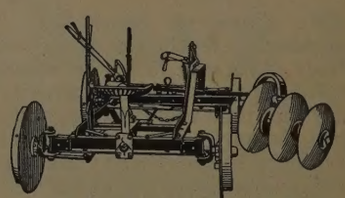
Proved to be an excellent machine for deeply cultivating heavy irrigation land.

A Harvey Implement for Every Need

THE BEETLEBACK cuts out all hand working under citrus trees, and keeps the ground level. It lifts up the branches, cultivates under them, and gently replaces them on the ground.

"HARVEY" 3-FURROW TRACTOR POWER LIFT HB7 MOULDBOARD ORCHARD PLOW: A one-man job. Built in sizes from two to six furrows.

THE "HARVEY" LANCIA DISC PLOW is designed specially for the hardest kind of plowing. Low overhead clearance for low overhanging trees. Can be racked over for both plowing close up to and away from the trees. Equipped with the famous **"HARVEY"** Power Lift or Screw Lifts which are operated from the seat of the Tractor.



"HARVEY" built "PETTY" PLOW: Plows out strips which have not been plowed for years. Cuts through couch grass with the greatest of ease. Also plows up to the trees and in the centre. **DISC CULTIVATING GANG** can be attached in place of Disc Plow Gang.

Agents in All States

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DANIEL HARVEY LIMITED

Orchard Implement Specialists
BOX HILL, VICTORIA

INTERSTATE REPRESENTATIVES—

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S.A.—Silbert, Sharp & Bishop, Rundle St., East Adelaide.
W.A.—Paterson & Co. Ltd., St. Georges Terrace, Perth.
Southern Tasmania—Southern Implement & Machinery Coy., Market Place, Hobart.
Queensland: Buzacott (Queensland) Ltd., 443 Adelaide St., Brisbane.
S.A.—Cole & Woodham, Box 12, Renmark.

- Victorian News and Notes -

Prizes for Apple Packing.

Bright Function at Pakenham Upper.

THE Pakenham Upper Hall was crowded at the evening on November 10, when trophies and prizes won by the children in Apple Packing Competitions at the Melbourne Royal, Castlemaine, and Bendigo Shows were presented.

Mr. J. McDonald, President of the State School Committee, presided. Mr. J. M. Ward, Superintendent of Horticulture, stated that the Shield presented by the Victorian Fruit Exporters' Handling Committee had been circulated for 14 years among State Schools attending apple packing classes conducted by the Department of Agriculture. It has, however, been won five times by the Pakenham Upper State School, and now becomes their property. A new Shield, stated Mr. Ward, has been generously donated by the Handling Committee, and he congratulated the Pakenham Upper School on securing the first win, and thus becoming the temporary holders of the new Shield. Mr. F. Boyd, Headmaster, received the Shield on behalf of the School.

APPLES FOR TROOPS.

A compulsory Apple a day for all men in military camps was suggested by Senator Wilson (U.A.P., S.A.) in the Senate recently, to assist the fruit industry.

The Minister for the Interior (Senator Foll) said that at the camp commandant's discretion Apples could be included in camp menus provided the computed cash value of the standard daily ration was not exceeded.

:: :: ::

The proposed Apple a day would be of material value in maintaining the health of the troops.

Robust young men in civil life know the value not only of an Apple a day but an "Apple at every meal." They miss this fruit in camp, and medicines become necessary.

It is hoped that at least one Apple a day will be provided for all soldiers and trainees in camps.

The Exporters' Handling Committee has also donated six cups, one for each of the children in the winning team, namely, Phyllis Stuchberry, Eileen Leslie, Olive Begg, Alma Martin, John Black, and Kevin Doyle.

For the Shield donated by the Gerrard Wire Tying Co. Pty. Ltd. for apple packing by Young Farmers' Clubs at the Melbourne Royal Show, Pakenham Upper tied with the Pakenham North Army Road Club, equal first with 98 points each. The presentation of the Shield has been made to each Club with a right to hold it for six months each, but as well, on behalf of the company, Mr. W. L. Gregory presented a handsome rose bowl to each of the successful clubs. Cash prizes, also donated by the Gerrard Company, were won as follows:—Marjory Mapleson, first, £3; Keith Mathews, second, £2; and Marjorie Black, third, £1. Mr. Gregory also presented the Gerrard Shield and Trophy, won by Pakenham Upper at the Bendigo Show.

Pruning Certificates from the Department of Agriculture were presented as follows:—Junior Section, Clifford Bumpstead; Senior Section, W. J. Carne, L. Frazer, and J. Sampson. (Certificates were also won by W. Deveney and S. Crosby.)

The Chairman expressed appreciation to the Departmental Instructor, Mr. W. Harris, who in responding congratulated the children and thanked the School Committee and the Young Farmers' Club.

Mr. M. Bennett, M.L.A., congratulated the winners, and said that the Department of Agriculture was to be complimented on their excellent educational work.

Appreciation was expressed to Mr. I. Woolf for presenting framed pictures of winners and prize cards, also for the use of his cool store and for other services.

During the evening there was an excellent concert programme followed by supper and dancing.

Meetings of growers were held in several districts protesting that the proposed advance of 2/- per case for Apples and 3/- per case for Pears were totally inadequate to cover even the cost of production.

Over 600 growers were in attendance at Box Hill. Meetings were also held at Doncaster, Croydon, Tyabb, and elsewhere. The price of 4/- per case for both Apples and Pears was requested.

Metropolitan growers are alarmed at the prospect of being unable to sell as usual in the Victoria Market, Melbourne.

The adjournment of the Legislative Assembly was moved by Lt. Col. Knox, who includes many fruitgrowers in his electorate. He stated that the proposed advance meant "stark staring" ruin to growers.

GIPPSLAND FRUIT MARKETING ASSOCIATION.

Annual Meeting Requests 3/- Per Case for Apples for Acquired Fruit.

District Fruit Packing Approved.

THERE was a large attendance at the annual meeting of the Gippsland Fruit Marketing Association held at Pakenham recently. The balance-sheet, which was adopted showed a balance of £123.

During discussion, it was reported that the Cool Stores Association and the Victorian Fruit Marketing Association were combining to form one body to speak with a united voice for the growers of Victoria. It was planned to have various district associations to speak for the growers to the central body. Growers present agreed that this was definitely a step in the right direction and decided that the G.F.M.A. continue as the central council for Gippsland.

Growers also discussed the matter of 2/- advance for Apples and 3/- for Pears by the Government for the 1940 crop, and a motion to the Department of Commerce was finally carried, stating that Gippsland growers could not carry on unless 3/- per case were guaranteed to cover cost of production.

Mr. S. Brown also spoke of the desirability of having a packing organisation connected with the G.F.M.A. and working in co-operation with the Board for the coming season. The motion that delegates be appointed to confer with representatives of the district cool stores and formulate a scheme for packing the crop was seconded by Mr. Harvie and carried.

A Sub-Committee to go into details was appointed as follows:—Messrs. D. C. Black, S. Brown, W. H. Carne, W. C. Harvie, R. Bailey, W. Brown, T. C. Whiteside, L. Thomas, and J. W. Hammond.

The officers elected for the following year were Messrs. J. J. Ahern (President), T. C. Whiteside (Vice-President), W. H. Carne (Secretary), and A. C. Prendergast (Auditor).

The following were elected as district representatives on the executive committee:—Messrs. F. Kennedy (Pakenham), W. C. Harvie (Pakenham Upper), R. A. W. Bailey (Narre Warren), T. C. Whiteside (Officer), L. Thomas (Bunyip), A. E. Towt (Garfield), and T. Black (Beaconsfield Upper).

Best by Test

Use

"VALLO"

Arsenate of Lead

(Paste or Powder)

and

Codlin Moth Tree Bands

The perfect combination to deal with the Codlin Moth pest

VICTOR LEGGO & FARMERS Ltd.

222 Queen Street, Melbourne

Phone C 1243 ***P.O. Box 508H***

Obtainable All Agents

ARE YOU GRUBBING?

Previous experience had convinced me that to be really efficient a grubbing machine should have ample power and ropes that will meet the heavy demands required of them. I found that shovel and axe work is very costly either by itself or in conjunction with a machine. The machine that offered these features with a host of others, was **THE "MONKEY" GRUBBER.**

It gave me the power of 260 pairs of hands in a simple and compact form; the lever is short, so that I am able to stand firm-footed and get the full stroke. There are two speeds in the machine, as well as an automatic release that allows me to let off a strain, or as the machine will work in any position, it comes in for all jobs that would require a chain block. It is taken to the job on a pair of wheels like a barn truck, and is rigged for work in a few minutes. The ropes are in lengths that I find easy to handle, and each one is fitted with hook and loop couplings, so simple and absolutely IT for effectiveness. The makers have included a sturdy snatch block with a novel method of securing to the ropes, and also a fine type of firm gripping rope shortener. The latter makes it very easy to accommodate the lengths of rope to the tree or stump being pulled, and is quickly released from the rope. The combination of so many time and labor saving features makes the "Monkey" Grubber a superior grubbing outfit.

REMEMBER FOR YOUR GRUBBING THERE'S ONLY

H. H. HINDS,
225 Clarence Street,
Sydney.

A. G. WEBSTER,
& SONS,
Hobart & Launceston.

REX ROBINSON,
83 Gipps Street,
Brisbane.

Leading Stores and Merchants, South and West Australia.

TREWHELLA BROS. Pty. Ltd. Trentham, Vic.

In Preparing Your Bordeaux Sprays Use . . .

ESA BLUESTONE

— Manufactured by —

THE ELECTROLYTIC REFINING & SMELTING COMPANY OF AUSTRALIA LTD.
PORT KEMBLA, NEW SOUTH WALES.

The Right Material for Plant Disease Prevention and Control
GUARANTEED 99% PURITY

GRADES—Mixed Crystals, Fines, Granulated (Snow), Packed in Suitable Containers for Growers' Requirements.

Agents for All States: ELDER SMITH & COMPANY LIMITED, All Capital Cities.

BOOKLET—"Better Yields by Spraying with E S A Bluestone" obtainable on application to Elder Smith & Co. Ltd.

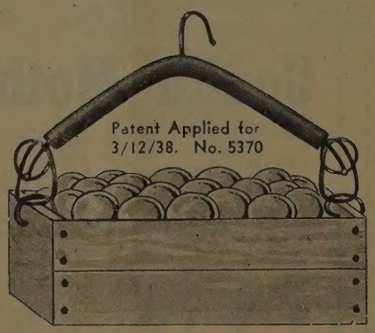
Important Notice to Fruitgrowers!

A SENSATIONAL DEVELOPMENT IN THE HARVESTING OF ALL FRESH FRUITS.

WICKS (PATENT) MASTERGRIP HANDLE

One handle per man turns all your cases into perfect picking bags.

Australian Distributors:
Fruitgrowers & Market-gardeners' Society Ltd.,
288a Rundle St., Adelaide, S.A.



A BOON TO EVERY FRUITGROWER.

EFFICIENT
LONG - LIFE
LOW - PRICED

For Supplies and Enquiries, write to Sole Victorian Agents:—

F. CAVE & CO. PTY. LTD.

Telegrams— "CAVECOFRUT."

391 Flinders St., Melbourne

Postal Address— Box 1956, G.P.O.

Letter to the Editor

AN APPEAL FOR UNITY.

The Editor,
"Fruit World."

Sir,

May I appeal through the medium of your paper for a greater measure of unity among fruitgrowers?

At the present time we are one and all faced with a problem which demands the utmost co-operation and unity of purpose. Instead, we have a section demanding the return of their individual selling right—no matter what happens to the rest! Have any of them given any time or thought to what would happen if we did not have a pool guaranteed by the Federal Government? If the Victoria Market was open to all growers and Tasmania sending unlimited quantities — not forgetting Western Australia's considerable surplus? After taking these things into consideration it would seem impossible to realise even the paltry advance already offered for the crop. It must be realised that anything for the common good must inflict some measure of individual sacrifice alike on export and metropolitan growers, so why this continued opposition which must be premature, as no authentic statement has yet been announced as to how it is proposed to supply the market, except Mr. Young's statement, that there would definitely be no tailboard selling. I took this to mean no individual grower selling his own crop. I think that was the interpretation he intended to convey.

He did state agents would be appointed, so why not growers? I would therefore urge all growers to forget the problem of marketing and accept the pool as the medium of distribution, and to unite in seeking recognition of our just claim for a guaranteed price of cost of production.

While Tasmania claims to produce for 2/- (which must leave room for doubt), Victoria very definitely cannot produce for less than 3/-. It would obviously be as unfair for Tasmania to receive 3/- per case with production at 2/-; as for Victoria to have to accept 2/- with production at 3/- per case. This position could, and should be adjusted by the difference in value of varieties.

These matters, however, can only be satisfactorily handled by a unanimous and reasonable request through our State representatives of the Federal Apple and Pear Board. They who fully recognise the position of the fruitgrowers and are at present making almost superhuman efforts to have the guarantee raised to 3/-, and are receiving more kicks than encouragement.

D. C. BLACK.

Pakenham Upper, Vic., 21/11/39.

Wanted to Sell, Buy or Exchange

Advertising Rates: Casual Advertisements 2d. per word; regular advertisements 1½d. per word.

This column will help you to dispose of unwanted machinery, etc., or obtain offers from other readers.

BOOKS.

"QUINN'S PRUNING."—A useful handbook on fruit tree and grape vine pruning. 280 pages, well illustrated. 5/3 post free. Secure a copy now from Box 1944, G.P.O., Melbourne, Victoria; or Box 2636 EE, G.P.O., Sydney, N.S.W.

New South Wales News and Notes

Griffith Producers' Co-operative.

Cool Storage Space is Being Doubled.

AT the recent annual meeting of the Griffith Producers' Co-operative Co. Ltd., the directors report stated that the Navel crop was the heaviest on record, over 165,000 lugs being delivered, against an estimate of 143,000. The Valencias delivered were approximately 118,000 lugs, also a record. Other citrus fruit deliveries for the year were:—Lemons, 19,064 lugs; Grapefruit, 10,957 lugs; and Mandarins, 1,992 lugs. Estimates for the 1939 Navel crop were 124,000 lugs, and at the close of the year 51,000 had been delivered.

In co-operation with the Department of Agriculture, the company assisted financially in a special investigation into the methods used on the area for the fumigation for Red Scale. Although weather conditions were not favorable for the investigation, much valuable information was gathered, which it was hoped to use to advantage in future operations.

Dried Fruits. Prune and Sultana growers had suffered severe losses through the heavy rain in the drying season, and tonnages delivered to the shed were considerably below those of last year, the totals being: 1938, 627 tons; 1939, 285 tons.

The chairman of directors stated the company would shortly spend £10,000 on additions to the buildings, and in duplicating the cool store.

The company cleared £4,121/17/10 net profit from the activities of the past year. The renewal of the contract for the sale annually of 4,000 tons of Peaches to H. Jones & Company (Sydney) Pty. Ltd. for a further period of ten years from the 1939-40 season was accepted.

Messrs. V. C. Williams (chairman), and W. Elder were re-elected directors, with Mr. A. E. Fairley taking the place of Mr. J. Sidlow, who did not seek re-election.

NEW SOUTH WALES.

Batlow: At a large meeting of fruitgrowers at Batlow the need was expressed for separate pools for the more valuable varieties of Apples and Pears.

The meeting requested a premium of 1/- per case on the advance to be paid to N.S.W. growers in view of the greater percentages which will be harvested in N.S.W. (due to location advantages, better varieties, and country organisations which cater for local marketing), failing this that an additional 9d. per case be made to N.S.W. growers for picking and cartage expenses, also that 30 days' grace from March 1 be allowed when application is made and approved in order to simplify the marketing from early districts.

Orange: The Orange Chamber of Commerce has protested against the inadequacy of the advance of 2/- per case on Apples and have resolved to contest this apparent injustice to the producers.

Sam: "Have you ever seen a straight Banana?"
Joe: "No, why?"
Sam: "Well, there's a bunch in the shop marked 'straight from Queensland.'"

Murrumbidgee Irrigation Area

CITRUS PLANTINGS EXCEED THAT OF DECIDUOUS THIS YEAR — SURVEY BEING TAKEN OF FLOOD DAMAGE — TREATMENT OF CITRUS WHEN NOT BADLY DAMAGED — THRIPS AND FROST CAUSE DAMAGE — CROP FORECASTS — WEATHER CONDITIONS CAUSE GOOD NATURAL HERBAGE AND CROPS.

(By Our Correspondent.)

THE PRESENT SEASON has been a favorable one for replanting in the orchard or for planting up new areas of land, and many growers have availed themselves of the favorable opportunity to extend their plantings.

In past seasons the planting of deciduous trees of various varieties has far exceeded the planting of citrus, but this year a decided swing over to citrus has been noted.

The figures of importations of stock from outside nurseries through the Griffith Producers' Co-op. Coy. has totalled 19,000 trees, of which 14,000 were Late Valencias, and 2,500 Washington Navels, and the balance mostly Lemons and Grapefruit.

Probably an equal amount of trees have been introduced by growers from other nurseries, and **a total planting of approximately 25,000 citrus trees has resulted.**

Deciduous plantings, however, have fallen off, and a total of approximately 16,000 trees have been planted, of which number the larger proportion were canning Peaches, Apricots and Pears, with a few acres of Prunes and Plums.

Flood Damage.

The very wet Winter delayed planting until somewhat later than usual in the season, and with the first burst of hot weather the results of flooding in many parts of the Area was very obvious.

A large number of the older deciduous trees have died out and the position is a very serious one for many growers, and the various packing companies on the Area have issued a questionnaire to all growers asking for a return of their loss in trees, as there may be a very marked decrease in the production from many orchards.

A conference of the officers of the Water Conservation Commission, Commonwealth Research Station, Department of Agriculture, and the Rural Bank, was held at Leeton last month to consider the very serious position which had arisen through the flooding of many farms during the past Winter, and as a result of the deliberations the questionnaire referred to was issued to growers in order to ascertain to what extent the damage had spread.

The suggestion that an aerial survey of the entire area be conducted, was adopted, and arrangements will probably shortly be made to conduct such a survey, provided that the various institutions whose interests are affected can find the available funds for same.

Peaches and Almonds seem to be the stock which has suffered most on flooded areas, but in a good many cases **Citrus** farms show signs of decline from the same cause, and drastic means are being taken on some farms to cope with this problem.

If the roots of the trees have not been seriously damaged through too long an immersion, a heavy cutting back will often give a satisfactory result in forcing out strong new growth (this is in the case of citrus), but with the hard cutting back of deciduous trees the result often causes a severe gumming and ultimate further decline, if the root system has been severely damaged.

If a citrus tree is cut hard back it must be immediately coated with a good lime wash, and further protected by wrapping bagging round the stem and main limbs which are exposed, as the mere painting of the trees does not afford a sufficient protection from the fierce rays of a Summer in these areas.

It is also advisable to cover every large cut with a protective material such as Colgraft or other suitable compound, so as to protect the wounds from the weather, and some particularly careful growers even go to the further extent of tacking a protecting piece of cardboard or fibro board over the top of the limb, in order to give further shelter to the bark.

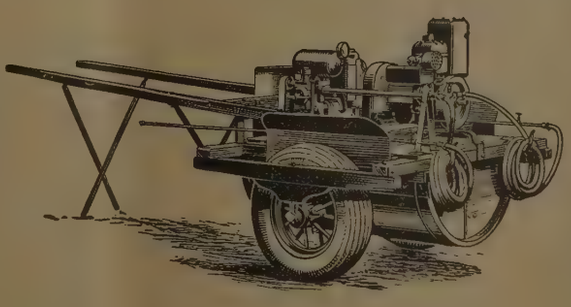
To cut back a citrus tree without these protective measures is only to hasten its end.

Crop Forecasts.

The forecast given last month of the very light **Granny Smith** crop, is unfortunately only too true, and there is practically a complete wipe-out of this variety owing to the attack of thrips, and in some parts of

An Extraordinary Record Of Spray Plant Service!

SIXTY-TWO Ronaldson-Tippett Sprays were serviced in Harcourt District (Vic.) this year. Total cost of duplicates for the whole 62 plants was 14/-, that is, 2¼d. per plant! We can vouch for the absolute accuracy of these figures. When it is realised that these plants are up to 11 years old the wonderful quality and durability built into them will be fully appreciated. It tells a story of outstanding engineering. —Buy The Right Machine First!



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Victorian Representative .. .. .. Esmond Russell Pty. Ltd., 395 Collins St., Melbourne
Southern Tasmanian Representative W. H. Ikin & Son, Dunn Street, Hobart.
Northern Tasmanian Representative Bell & Gerrard, No. 200 Cimitiere St., Launceston.
West Australian Representative . . The Westralian Farmers Ltd., Perth.

the Area frost was also a contributing factor.

Trees among a block of Granny Smith, of the Cleopatra and King David varieties, which are generally only used as pollinaters, are carrying light crops, and this is attributed by some observers to the fact that the shorter and more fleshy stems of the latter named varieties, hold out better against the ravages of the thrips. Whatever may be the cause, however, the fact remains that only the two varieties named seem to be carrying any crop at all, and these are light.

In some farms there are quite good crops of **Prunes** showing, and even some good crops of **Robes** have been noted, but this variety is generally poor, and the **Prune d'Agens** are showing up better. Frosts at blossoming time are blamed for the shortage, but lack of suitable pollination will cause a poor setting with the Robe Prune, although even where that factor is present, frost will take its heavy toll.

Pears: Crops of these are generally good, and the three principal varieties grown, viz. **Williams, Packham Triumph** and **Josephine** are all carrying satisfactory crops.

Sultanas, of which there are not now a very large acreage left, suffered early in the season from frost, and the subsequent wet and muggy weather has caused a bad outbreak of black spot on this variety—the crop will be a very light one.

In the Yenda district where the frost problem is a very serious one, the "heating" of the vineyards has been adopted in some cases, and with a very satisfactory result in the saving of the crop on the portion treated, which stands out in marked contrast to the unheated portion, yet it is a fairly expensive practice to keep up every year, and unless it is continued there is no guarantee of a crop, and many growers are becoming very discouraged when year after year their crops are cut out.

Wine Grapes and table varieties seem to bear better crops in this area than does the Sultana vine, and there are very few cases where even in a really good season, this variety will carry what a grower would consider a really good crop.

Apricots: Good crops of this fruit is to be seen on many farms, but the shot-hole fungus is still in evidence, and the seasonal conditions have made it very hard to contend with any disease of this type.

:: :: ::

On the large area farms very good crops of oats are being stripped, and there are some remarkably fine crops of wheat to be seen, there seems to be a scarcity of bags, however, and many settlers are scouring the country to obtain bags in which to place their crops. The season has been very favorable for an enormous growth of natural herbage, and everywhere the country is a mass of green growth, which may be a source of potential danger later in the season when bush fires are likely to break out.

:: :: ::

In both Leeton and Griffith, as in other centres, there is great activity among the Red Cross Society, Country Women's Association, and kindred societies, in the preparation of comforts for the militia units, and those members who have enlisted in the 2nd A.I.F. Members of all the bodies are working hard to ensure an adequate supply of comforts being in readiness to send on when they are required, and packets of useful articles are given to every man on leaving this centre to go to the various camps.

The militia are expected back from camp during the present week, and it is understood that after a spell of about two months they will again return to camp for further military training.

GOULBURN VALLEY NOTES.

Crop Prospects for Apricots, W.B.C. Pears, and Peaches :: Meeting of Northern Victoria Fruitgrowers' Association Decides to Support Board :: Northern Fruitgrowers Request Exemption of Pears Owing to Light Crop :: Bonus Paid by Rosella Preserving Co.

By Our Correspondent.

ALTHOUGH THE PROSPECTS for the fruitgrowers of the Goulburn Valley are not as bright this season as they have been for the last few years, it would appear that unless any further unforseen circumstances arise most growers will get a moderate return for their labors, as prices for canning fruit are expected to be much higher than last season.

Apricots are still carrying a good crop, although there is a fair amount of Shot Hole showing, which has been caused by unsettled, showery weather. Serious hail damage has considerably reduced the proportion of Apricots suitable for canning.

Some growers claim up to 75 per cent. damage by hail, and while one grower at Toolamba had the damage assessed by his insurance company at 95 per cent. However, these are isolated cases.

The fruit is sizing up well, and should prove of very good quality. It has responded wonderfully to the first irrigation, which took place from November 20 onwards.

The main varieties are **Moorpark, Tilton, Trevatt,** and **Shipleys** and **Heemskerk,** while **Oullin's Early** and a few **Newcastle** are grown for the markets. These two last varieties will commence to ripen about the first week in December. They are one week later than usual, as very little warm weather has been experienced up to date.

The position of the **W.B.C. Pears** has considerably improved since my last report, and it is now estimated there will be a 70 to 75 per cent. crop. The fruit is perfectly clean, with no sign of Black Spot, is sizing up well, and should be of excellent quality. The trees are looking particularly well, and are making a strong growth.

Codling Moth infestation has so far been less prevalent than usual, but growers have been systematical in spraying, and already three applications of arsenate of lead have been applied. Most growers have been busy fixing the bands in position on the butts of the Pear trees.

The **Peach** crop is generally estimated at being from 50 to 60 per cent. of the normal quantity.

The **Pullar Cling** variety is looking better, and the fruit is growing well. It is expected that the size will largely increase the tonnage, so it is fortunate that this variety covers the largest acreage.

Pullar Cling, owing to its red centre, has not been too popular with canners in recent years, but last season, in drought conditions, it saved the growers in an adverse season by producing a bumper crop. This season again the Pullar Cling is going to be the growers' and the canners' main supply, as all mid-season varieties are particularly light.

Mid-season Peaches suffered the heaviest loss of trees, and such varieties as **Sims** and **Phillips** are carrying very little fruit, while **Golden Queen** are showing a fair crop.

A similar plight to that which has befallen many Goulburn Valley growers is being experienced in the Leeton district of New South Wales, where some growers have lost the whole of their Peach trees. It is stated that copious irrigation of Rice fields, which require up to six acre feet of water, has created a serious underground water problem. **Bores have been sunk by the authorities and water has been discovered 18 inches under the surface.**

Growers' Co-operation.

At a largely attended meeting of the Northern Victoria Fruitgrowers' Association, held recently at Kyabram, a resolution was passed complimenting the Apple and Pear Export Control Board on its efforts to market the forthcoming crop, and urging growers to co-operate with the Board in every possible way in its difficult task.

Mr. D. G. Wills, the Association's representative in Sydney, was present at the meeting, and gave a report on the transport and handling on all consignments of fruit sent to the Sydney markets. Delegates from Tatura, Lancaster, Shepparton, Ardmona, Kyabram and Bamawm Associations were represented.

The Association has fixed January 13 as the time limit for agents and their representatives to canvass for fruit in the Goulburn Valley.

The approved list of Sydney selling agents for season 1939-1940 is as follows:—J. Holmes Ltd., Salter Bros., H. C. Lockart, H. P. Woodward, Silk Bros., J. Jenkins, L. T. Locke, W. J. Sinclair, Hopkins & Lipscombe, P. Brook, F. G. H. Rogers, A H. Walker, H. T. Greentree, Buhl & Hacking, W. Musgrove, M. Walters & Co., F. Chilton, P. D. Society, C. G. Kelleway & Sons, L. B. Isaacs, J. W. Bryant, J. W. Kirkwood, N. & A. Company, F. Picone, Watkins & Evans.

Exemption of Pears.

At a further meeting of the Northern Victoria Fruitgrowers' Association, held at Kyabram on Friday, November 10, it was agreed to support the request of the Southern Fruitgrowers that **Pears** be exempted from compulsory acquisition by the Federal Government.

With this end in view it was decided to have a deputation to the Apple and Pear Board, pointing out that owing to the light crop of Pears, it was considered unnecessary to bring Pears into the pool.

Rosella Co.'s Bonus.

The Rosella Preserving Co. has paid Goulburn Valley Growers a bonus of £1 per ton on canning Peaches supplied last season.

This payment is much appreciated by suppliers, and the company can look forward to their loyal support during the coming season, when supplies of fruit will be somewhat limited, owing to lighter crops.

PURE FRUIT JUICES.

New Industry in Tasmania.

THE Port Huon Fruitgrowers' Co-operative Association Limited, of Hobart, has now formed a subsidiary company called The Port Huon Fruit Juice Pty. Ltd., for the purpose of the production of fruit juices, together with other fruit products that can be readily made and are sought after, and the marketing of such juices and vegetables.

A new factory has been erected at the Castray Esplanade factory site of the Association, which is most suitable for the production and keeping of such products. The latest machinery has been installed from overseas, and the services secured of two experts from abroad who have been producing these fruit juices for the last fifteen years. The production of these juices and other products will commence within a few weeks.

About fifteen years ago the Continent and the United States of America discovered that fresh fruit was not only good to be eaten but also to be consumed as drinks. A huge industry with a yearly output of hundreds of millions of gallons grew up rapidly within a short time, and wherever it was started it was a success. On its triumphal procession around the world it came to the United Kingdom four years ago, and again was a success.

From a health point of view the medical profession has been prescribing fruit juices for many complaints now inherent in the human being, but Australia has been providing synthetic drinks, which from a health point of view are not desirable.

The juice that will be produced by the new company will be produced under the greatest care and with the latest machinery and experience. The juice will keep its natural flavor and freshness for an unlimited time without adding any chemicals or preservatives. The juice will not contain any artificial coloring and neither water nor sugar; it will be pure "liquid fruit" in the true sense of the word.

The price will be such that everyone can afford to buy it.

The consumption of fruit juices in America has reached very large dimensions, namely, 150 million gallons per annum, and in Germany some 90 million gallons, and there is a very large demand now in the United Kingdom for such juices. Other Continental countries are producing some 15 million gallons. Germany alone uses 4½ million bushels of Apples for juice.

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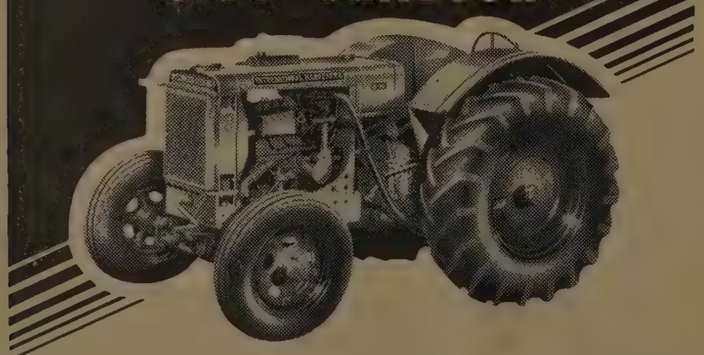

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CANNING FRUIT.

New Season's Prices For Some Lines.

Prices for Peaches, Pears and Pineapples Not Decided Yet.

THE Fruit Industry Sugar Concession Committee has announced the following minimum prices for fresh fruits to be paid by manufacturers to growers in respect of 1940 season, which includes several kinds of fruit harvested during the last few weeks of 1939, figures in parentheses showing opening rates for the 1939 season:—

	Canning. Per lb.	Jam Manufacturers. Per lb.
Black Currants	3¼d. (3¼d.)	3¼d. (3¼d.)
Gooseberries	2d. (1½d.)	1¾d. (1½d.)
Loganberries	3d. (2¾d.)	2½d. (2¼d.)
Raspberries	3½d. (3¼d.)	3d. (2¾d.)
Strawberries	5½d. (5d.)	5d. (4½d.)
Kentish Cherries	2¼d. (2d.)	2¼d. (2d.)
Red Currants	2½d. (—)	2½d. (—)
	Per Ton.	Per Ton.
Oullins Apricots	£9 (—)	£9 (—)
Other Apricots	£13 (£12)	£11 (£10)
Plums	£8 (—)	£8 (£6)
Quinces	£8 (—)	£7 (£6)

The Committee stated that it had decided **to defer consideration of the minimum factory prices to be paid for Peaches, Pears, and Pineapples** until information was received from the Commonwealth Government as to the prices that would be paid for those fruits in canned form by the British Government or by any control board established in the United Kingdom for the purchase of canned fruits from Australia for the duration of the war.

It was hoped that prices for sales of canned fruits to the United Kingdom would be satisfactorily arranged in the near future.

With regard to exports of berry fruit pulps, the committee does not contemplate affording financial assistance thereon in respect of shipments from the 1940 pack.

BENDIGO PRESERVING CO.

The annual meeting of the Bendigo Preserving Co. Ltd. was held on November 30.

It was announced that steps are to be taken to increase the capital of the company by a further 11,177 £1 shares, fully paid. It was pointed out by the Chairman (Mr. W. Ewing) that the authorised capital of the company was 50,000 shares of £1 each, and the issued capital was 11,177 fully paid shares. The amount of subscribed capital was now inadequate for the increasing requirements of the company. Members of the board, who had a majority of the shares, intended taking up an equal number to their present holding.

KYABRAM CO-OP. CANNERY.

The Kyabram Co-operative Fruit Preserving Co. Ltd. earned a net profit of £11,665, after allowing £4,900 for taxation, in the year ended September 30, an increase of £211 on the previous year, when taxation provision was £2,475. The debit profit and loss balance is reduced to £31,251. Gross earnings were £45,433, against £43,374 in 1937-38. The directors stated that the adverse seasonal conditions were reflected in the lower tonnage of fruit handled. The quantity processed was 6,153 tons, producing approximately 9,200,000 cans of fruit and 177 tons of fruit pulp. Sales for the year were maintained. To maintain plant capacity in line with prospective fresh fruit production, the installation of additional processing units is now in hand.

SHEPPARTON CANNERY.

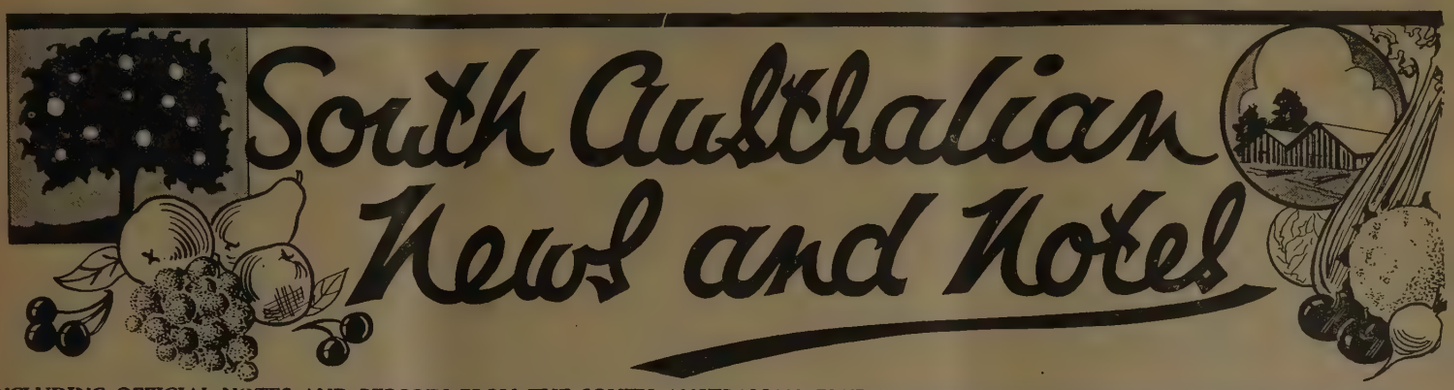
Further Payment of £1 Per Ton to Growers.

Fruit growers in the Shepparton (Vic.) Area are appreciative of the fact that the Shepparton Fruit Preserving Co. have agreed to pay an extra £1 per ton on canning and pulp Apricots, Peaches, and Pears totalling £11,787.

This is the second distribution made by the company during the past five weeks, the total amount involved in the two payments totalling £23,574.

A project is in hand for establishing a canning factory at Millthorpe, N.S.W., for utilising surplus crops of Apples in such districts as Orange, Batlow, and elsewhere.

(Canning Notes continued on page 21.)



INCLUDING OFFICIAL NOTES AND REPORTS FROM THE SOUTH AUSTRALIAN FRUITGROWERS' & MARKET GARDENERS' ASSOCIATION.

S.A. Fruitgrowers' and Market Gardeners' Association Incorp.

Meeting of Executive Committee

THE EXECUTIVE COMMITTEE of the above Association met in the Association offices on Friday, November 24, 1939.

Mr. H. N. Wicks (President) occupied the chair.

There were present: Messrs. F. A. Wicks, F. Hughes, G. H. Schultz, L. J. Wicks, F. P. Short, W. H. Ind, O. Essalbach, A. E. Brealey, C. J. Pitt, E. L. Giles, G. Jennings, R. Jackson, A. J. Hollister, S. H. Coleman, H. B. Robson, J. B. Randell, C. H. Ragless, R. G. Hannaford, W. J. Bishop, C. Ridley, J. Turner, A. Elliott, N. T. Hobbs, R. A. Cramond, A. O. Petersen.

Correspondence.

Minister of Agriculture: A reply to letter forwarded to the Minister on October 27, with relation to African Boxthorn being declared a noxious weed.

The text of the reply was considered satisfactory and received.

A further letter concerning Boxthorn was also received.

A statement from the Department of Agriculture setting out figures of fruit held in cold store as at 31/10/39 was received.

Mr. C. Howard, of 4 Laurel Avenue, Linden Gardens, wrote concerning extraction of essential oils from citrus fruits.

The Fruit Industry Sugar Concession Committee advised fixed prices determined by the Committee for 1940 berry fruit processing season.

The Department of Agriculture, advising the results of Codling Moth lure records at the Blackwood Experimental Orchard.

Mr. F. A. Wicks moved:—

"That the Department be thanked for the information concerning Codling Moth, and ask that the Secretary be informed immediately the peak is anticipated."

Seconded Mr. J. Turner. Carried.

Sectional Notes.

Soft Fruit Section: The Chairman Mr. F. Hughes, reported that the Section held its annual meeting on November 10, when officers had been appointed, and preliminary arrangements made for the coming season.

Citrus Section: Mr. F. A. Wicks, Chairman, reported that the Price Fixing Committee had increased prices on three occasions during the month, but the season was now practically finished.

Cherry Section: The Chairman, Mr. W. J. Bishop, stated that the Cherry season was now getting busy. Crops are patchy, but in certain districts very satisfactory.

Potato Section: Mr. C. J. Pitt stated that just at present the crop was looking better than for some years.

Apple Section: In the absence of the Chairman, Mr. M. J. Vickers, the President of the Association (Mr. H. N. Wicks) reported that through frosts and thrips the Apple crop in S.A. had dwindled by 50 per cent. to 60 per cent. The crop generally was patchy. He stated that at a recent meeting of Apple growers, he had been appointed as the growers' representative on the State Apple Committee. The indications at present were for a certain amount of fruit to be exported.

The discussion which followed favored a vigorous protest being made against the Federal Acquisition Scheme. Other opinions favored a greater first advance to growers. Mr. W. J. Bishop moved:—

"That we support the other States in requesting an increased first advance to growers for Apples and Pears based on the cost of production, for S.A., with its shortened crop, has still to meet the costs involved by a heavy crop."

Seconded Mr. R. A. Cramond. Carried.

Local Apple Scheme: Mr. R. Jackson, of Paracombe, advanced several suggestions for the disposal of the Apple crop through a voluntary scheme.

Mr. W. J. Bishop moved:—

"That a minute expressing the appreciation of the Executive to Mr. Jackson be recorded."

Seconded Mr. L. J. Wicks. Carried.

Fruitgrowers' and Market Gardeners' Society Limited: The Chairman of the Board (Mr. W. J. Bishop) reported that the Society was undergoing changes of policy. He asked growers who were not using the General Assurance Co. for their insurance to enquire re the advantages which were available to members of the Association.

Use of Manure Bags: A resolution was received from the Marion Branch as follows:—

"That the delegates ask the Secretary of the Association to enquire re permission given for the handling of wheat in secondhand bags, e.g., manure bags."

Resolved that the Secretary make full enquiries into this matter.

Finance: The Secretary presented the financial statement to date, and a list of accounts for payment. Resolved that accounts be paid.

Blackboard in Market: Mr. F. Hughes reported that he and the Secretary had approached the Market Coy. re placing a blackboard in the Market to convey to growers fixed prices, etc., and same was now erected.

Next Meeting: Owing to the Xmas season, it was resolved that the next meeting be held on Friday, December 22, 1939.

Tablet Unveiled to the Memory of the Late Mr. H. J. Bishop

Before a large attendance, the Premier of South Australia (Hon. T. Playford) unveiled a tablet in the Newmarket, erected on the Office Wall of the Adelaide Fruit & Produce Exchange Co. Ltd., to perpetuate the memory of the late Mr. H. J. Bishop.

The tablet, which was of bronze, had embossed thereon a likeness of Mr. Bishop, and contained the following wording:—

To Perpetuate the Memory
of
H. J. BISHOP
Director

The Adelaide Fruit & Produce Exchange Co. Ltd.
1920-1938

Chairman
1928-1938

A real friend whose word was his bond.

Erected by his many admirers.

Following the unveiling, Messrs. T. H. Hayman (Wholesale Fruit Merchants' Association), H. N. Wicks (S.A. Fruitgrowers and Market Gardeners' Association), J. Cowling (for the market companies), and the Hon. H. Homburg (other interests), delivered short addresses on Mr. Bishop's life in the industry.

At the conclusion of the ceremony the family of Mr. Bishop placed a laurel wreath at the foot of the tablet.

S.A. Chief Horticulturist Returns

Mr. A. G. Strickland, Chief Horticulturist in the Department of Agriculture in South Australia, who has been to the United Kingdom at the request of the Federal Government to study Australia's fruit export possibilities will return to Adelaide early in December.

On his return journey from England he visited America, and the information he has gleaned will be of invaluable assistance to fruitgrowers in this State.

Recently, at Auckland, N.Z., Mr. Strickland made a statement on the disposal of the fruit output. He expressed the view that fruitgrowers in Australia and New Zealand will face a serious position as a result of wartime shipping restrictions unless a way was found to dispose of their output. While abroad he investigated methods of utilising the fruit surplus in the event of all refrigerated ships being used for other produce. He said that there was an increased demand for Apple juice in England, and also a profitable market for dried Apples.

Apple butter and Apple sauce were other promising outlets.

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SOUTH AUSTRALIAN APPLE COMMITTEE.

Under the terms of the Federal Government's Apple and Pear Acquisition Scheme, a Committee has been informed in South Australia to carry out the provisions of the Act in that State.

The Committee consists of the two South Australian representatives on the Australian Apple and Pear Board, a growers' representative, a merchants representative, and a representative of the State Government.

To appoint the growers' representative a general meeting of Apple and Pear growers was held in the meeting room of the S.A. Fruitgrowers' and Market Gardeners' Association Incorp. 288a Rundle-street, Adelaide, on Friday, November 17 last, and Mr. H. N. Wicks, President of the Association, was unanimously elected.

It was subsequently announced that the Committee would be as follows:—Messrs. M. J. Vickers, R. Searcy (Board members), H. N. Wicks (growers), L. J. Bishop (merchants), G. Pope (Government).

At the first meeting of the Committee, held on Wednesday, November 22, Mr. Pope was appointed as Chairman of the Committee.

FRUIT HELD IN COLD STORE.

The Department of Agriculture advise the undermentioned fruit quantities were held in cold storage in South Australia on 31/10/39:—

Apples	37,931
Pears	131
Total	38,062

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ACCIDENT FIRE AND LIFE ASSURANCE CORPORATION LTD.
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F. & M.G. Society Ltd.

South Australian News and Notes—*Cont'd.*

BAROSSA FRUITGROWERS' ASSOCIATION.

On Friday, November 24, Messrs. H. N. Wicks (President), A. Stuart (Secretary), M. J. Vickers (Chairman, Apple and Pear Section), W. J. Bishop (Chairman, Cherry Section), and F. Hughes (Chairman, Soft Fruit Section) of the S.A. Fruitgrowers' and Market Gardeners' Association, attended a meeting of the Barossa Fruitgrowers' Association, Nuriootpa, at the request of that body.

Each visitor addressed the meeting on the problems confronting growers to-day, particularly Apple and Pear growers, pointing out the successes achieved by the S.A. Fruitgrowers' and Market Gardeners' Association through co-operative effort.

The meeting acknowledged the need for co-operation, and the uniting of all fruitgrowers under one head, and a resolution that the Barossa Association form itself into a Branch of the S.A. Fruitgrowers' and Market Gardeners' Association was unanimously carried.

Arrangements for the amalgamation were entrusted to a local Committee.

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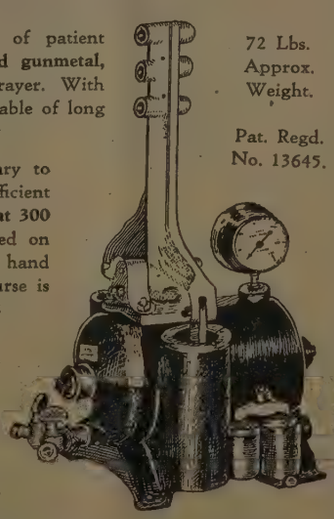

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The South Australian Fruit Marketing Association Inc.

Executive Committee

MINUTES of monthly meeting of members held at the Secretary's office, Brookman Buildings, Adelaide, on Friday, November 24, 1939, at 3.30 p.m.

Present: Messrs. R. G. Hannaford, M. G. Basey, H. N. Wicks, A. O. Petersen, D. Norsworthy, J. B. Randell, P. R. B. Searcy, S. M. James, F. B. James, A. R. Willsmore, F. Roley, W. W. Miller, H. M. Charlick, J. H. Dunning, L. J. Bishop, G. S. Queale, F. F. Redden, M J. Vickers, W. F. E. Smith, and the Secretary.

Apologies: Messrs. R. H. A. Lewis and E. Leishman.

Junior Apple Packing Prize.

Mrs. Coombe attended the meeting and received the cup presented by the Association for Junior Apple Packing at the Royal Agricultural Society Show, the cup being won by her son, J. Coombe, who was unable to attend to receive it.

Export Apple Prize.

The Secretary read the letter from Mr. W. Christian, Verdun, winner of the Export Apple prize at the Royal Agricultural Society Show, stating that he preferred the prize in cash, and the Secretary was instructed to forward a cheque for £6/6/- accordingly.

Annual General Meeting.

It was resolved that the annual general meeting of members be held on Friday, December 15, if the Minister of Commerce can attend on that day; alternatively, the meeting to be held on the third Friday in January, the matter to be left in the hands of the President and Secretary to finalise.

Correspondence.

Letter from Senator G. McLeay, advising that he would not be able to attend the general meeting if held on November 24.

Letters from Australian Apple and Pear Council, enclosing copy of the financial statement of the Council for year ended September 30, 1939, and enclosing copy of Australian Trade Commissioners notes re Eastern trade, etc.

Membership.

Membership applications were received from the under-mentioned:—Messrs. M. S. Redden, Jnr. (Cudlee Creek), S. H. Coleman (Mount Crawford), A. T. Wakefield (Paracombe), Samuel Hawke (Uraidla), H. S. Hobbs (Cudlee Creek), Ernest Holliday (Summertown), R. and H. Landers (Eden Valley), E. M. C. Nickels (Forreston), V. N. Rathjen (Birdwood), H. E. Stephenson (Kersbrook), W. G. Oliver (Uraidla).

Applications were approved, and it was resolved they should be entered on the membership register.

Research Sub-Committee.

Mr. Wicks reported that at the meeting of the Sub-Committee suggestions had been made for the revision of the Show Schedule re prizes for Export Apples and Pears, and a number of suggestions had been drafted which Mr. Wicks would submit to the next meeting of the Royal Agricultural Society.

Mr. Petersen had submitted some leaves suffering from burn damage following a spray, and also samples of leaves affected by "Gold Leaf."

December Meeting.

If the annual general meeting is fixed for December 15 it will be preceded by the monthly meeting of the Executive Committee, but if the annual meeting is not to be held till January the Executive Committee will meet at the usual time on December 15.

Publicity Committee.

Mr. M. G. Basey stated that he considered steps should be taken to see what could be done to introduce fruit, particularly Apples, into the "Tuck Shops" at various schools where at the present time fruit was not obtainable. It was agreed that steps be taken in this direction.

Apple Pool Scheme.

Mr. F. F. Redden stated that the proposed advance of 2/- per case to be made by the Federal Government in connection with the Apple Pool was only to be on 75 per cent. of the estimated commercial crop, and would actually represent 1/6 per case on the total crop, and this amount would be under the cost of production, and prove disastrous to many growers. A general discussion followed, and Mr. Redden proposed the following resolution:—

"That we support the other States in requesting an increased first advance for Apples and Pears based on the cost of production. As with shortened crops South Australia is called upon to meet the same costs of production as involved in a heavy crop."

On being put to the meeting this was carried and representatives on the Apple and Pear Board were asked to do everything possible to assist in obtaining an increased advance.

VICTORIAN RAILWAYS.

The Victorian Railways announce that military rail traffic during October was the heaviest for twenty-five years. On one day ten special trains from various parts of Victoria arrived at Seymour and adjacent stopping places within a period of six hours. So excellent was the co-operation between the Department and the Defence Authorities that all transport of troops and equipment was carried out without the slightest interference with regular time-tables.

The Railways Commissioners are also very pleased with the growth of the Tourist Bureau, which has necessitated the opening of their new premises in Collins-street. The service by rail, road, sea and air is unsurpassed by any other tourist organisation in the Commonwealth.

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SOUTH AUSTRALIA

Mid-Murray Notes

Rains Interrupt Routine Work :: Irrigations to Continue Despite Plentiful Rains :: Season's Crop Prospects :: Some Hail Damage :: Pest Control and Spraying Methods :: Codling Moth, Black Spot, Light Brown Apple Moth, Thrips, Pear Leaf Blister Mite and Leaf Scorch :: Inter-branch Visits Prove Very Successful.

(By Our Correspondent.)

RENMARK, Nov. 24, 1939.

THIS HAS BEEN an extraordinary season. Here we are almost into December and have had no Summer warmth as yet. Early Spring brought cold gusty weather, and this was followed by a series of thunderstorms, bringing more than two inches of rain, and now we are experiencing intermittent rain at weekly intervals which has made it extremely difficult to keep the weeds down.

Irrigation.

The second irrigation had to be interrupted when nearly completed through the incidence of heavy rain, and after a delay of about ten days is now being carried on to a finish. The third irrigation is to commence on November 27, and the decision of the Board of the Irrigation Trust has been severely criticised in consequence of sending along another irrigation at a time when blocks are still wet and smothered with weeds because of the inability to carry out cultivation.

The Irrigation Trust, however, must consider the possibilities of a dramatic change in the weather at this time of the year, and because we have not yet had any Summer up to date, this does not follow that the cool weather will continue, and in the past years the irrigation settlements have frequently suffered through lack of foresight on the part of those who determine when irrigations should commence.

The members of the Irrigation Trust consist of seven elected growers, who in their wisdom, treat the irrigation requirements of the settlement as a whole and are not actuated by individual needs. However, the criticisms levelled at them are from purely selfish motives by growers with short memories.

As the land has been plentifully supplied with moisture since bud burst, and we have had many tropical downpours, with accompanying thunderstorms, the vines have grown at terrific speed. **Currants** and **Sultanas** have set well, and **Gordos** appear to follow their example also. Taken as a whole, all the vines are showing an exceptionally good crop at present.

Some growers were unfortunate enough to be in the wake of a severe hailstorm which covered a strip of country about a mile wide and travelled through the Block E area. The hail only lasted about ten minutes, but in those few minutes a great deal of individual damage was done. Shoots, leaves and fruit were strewn in all directions and gave the blocks the appearance of having been visited by a herd of cows. Apricots were hail marked, and when dried will suffer deterioration in grade.

Pest Control.

The appearance of **Black Spot** was only to be expected after such persistent rain as we have had, and many growers are spraying with Bordeaux mixture to prevent it attacking the bunches. Although the outbreak has not yet reached serious proportions, the very sight of it should be sufficient to make growers aware of the possible danger. But, human nature, being what it is, there are still individuals who are prepared to take a risk and do not spray.

Many growers who do spray, take the easiest and most convenient course by buying proprietary lines of ready-made Bordeaux or Burgundy mixture which can be tipped straight into the vat, without any further bother.

The grower who counts the cost will use the powdered bluestone and lime or limil, at a 6-4-40 strength and then test it with litmus paper to ensure it being alkaline in reaction.

By way of comparison in cost, the proprietary line costs us just about double that of powdered bluestone and limil. For the life of me I cannot see why the ready-made Bordeaux should cost what it does. Bluestone costs just over 4d. per lb. in Renmark, and by mixing a little lime or soda with it, the proprietary line costs 1/- per lb.—a truly disproportionate comparison. Powdered bluestone is a wonderful improvement on the old bluestone crystals and dissolves within a few minutes if agitated in the spray vat.

Many growers have included colloidal sulphur, and arsenate of lead with their Bordeaux spray. The colloidal sulphur is to guard against Oidium, and the arsenate of lead to prevent the grub of the Light Brown Apple Moth from doing extensive damage.

The grub of the Apple Moth is a little active fellow about 1/16th of an inch thick by about 5/8ths of an inch long, and of the same green color as the vine leaves. It is not easy to find at work among the fruit bunches, but he damages the fruit by nipping off the berries, sometimes singly, and sometimes half a bunch and even a whole bunch is eaten through at the stalk. As he moves from place to place he leaves a silken thread which can be seen interwoven between the berries, which sometimes catches many of the blossom caps and unites them in a cluster. I have seen Sultana bunches almost stripped of berries by this grub soon after setting, and when a grower is not conversant with the habits of the grub with a green mantle, he attributes the cause to bud setting.

There must be several broods during the year, for, at a later period, when the fruit is ripening, he delights to harbor in the centre of a good big bunch of fruit, and puncture the berries in his immediate vicinity, and this causes mould to commence when we have rain during the ripening stage.

Soon after setting is completed, growers invariably complain of having had a bad drop of berries in their Sultanas, but as this is a yearly complaint it resolves itself into just a natural seasonal drop.

If all the berries were to set on a Sultana bunch it would be a compact mass of fruit which would be difficult to handle on the drying green, and it is only on the seemingly "scraggy" appearance immediately after setting that growers assume that they have not set well.

I have often been asked whether **thrips** affect the setting of vine fruits, but can find no evidence to support the theory. A few years ago, we had a bad infestation of thrips and I felt rather concerned about it as many of these insects could be found harboring in the bunches. The fruit set quite normally, however, and it is my belief that the construction of the vine blossom does not lend itself to sufficient protection for the thrips to do any damage. Furthermore, I have never seen this insect referred to in any viticultural work as constituting a major pest for vine fruits.

We have been so accustomed to look upon codling moth as the only pest to deal with in connection with our Duchess Pears that the minor pests are lost sight of unless they make their presence very noticeable. For a long time we have been more or less troubled to a degree, with what appeared to be "limb rubbed" fruit, but Mr. J. Johnson, one of our large Pear Growers, on going into the matter, and finding that the fruit is still marked when not near the leaf, decided that it must be caused by an insect.

Mr. Johnson now believes the damage to be caused by the **Pear Leaf Blister Mite**. The markings on the Pears are only superficial and do not affect the sale of the fruit for fresh marketing purposes, but when used for drying, it leaves a brown scar which reduces tha grade of the finished article.

In the past two seasons many of our Pear trees have developed brown leaves during the Summer, and sometimes in the Autumn before the natural leaf fall period. This condition has been attributed to leaf scorch. During the last year's heat wave many trees lost their leaves so severely that the crop was affected.

In dealing with leaf scorch recently, Mr. H. Kemp (Research Officer to the South Australian Department of Agriculture, recommended **the inclusion of lime to the arsenate of lead spray at a strength of 4 lbs. per 100 gals., and mentioned that experimental plots treated in this way showed remarkable results, leaf drop being reduced from 64 per cent. to 4 per cent.**

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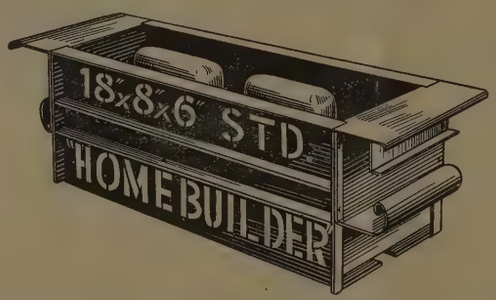

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The Horticultural Branch of the Department of Agriculture has been carrying out a series of tests by spraying for the control of codling moth. For several years these experiments were carried out at Berri, but were not entirely satisfactory. Last year the experiments were carried out under the supervision of Mr. F. Arndt (Horticultural Adviser), and were made on the property of Mr. P. M. Bundey, on Chowilla-street, Renmark, and situated quite close to my own property.

Throughout the season lure pots consisting of a 10 per cent. solution of molasses were in use, but the lures were not an infallible guide to moth flights as so few were caught throughout the period of observation. Five sprayings were given to all plots upon which the experiments were carried out. ' The first was given on October 13 and 14, the second on October 29, the third on November 21, the fourth on December 14, and the fifth on January 4.

Lot A consisted of 123 trees and were sprayed with 4 lbs. arsenate of lead powder and 2 pints white oil per 100 gals. water with the exception of the last spraying when the oil was omitted. Of the 6,949 Pears examined, 53 were affected either with a sting or with a grub. This works out at 0.76 percentage of loss, and proved to be the most satisfactory plot treated.

Using 6 lbs. arsenate powder without white oil showed 2.16 per cent. loss from grub. Using 4 lbs. arsenate of lead powder without oil showed 2.26 per cent. affected Pears. The experiment where only 2 lbs. arsenate of lead powder per 100 gals. was used without white oil showed the largest percentage of affected fruit and this amounted to 6.31 per cent. In our plot sprayed by Mr. Bundey, a check on the affected fruit was made, and while the strength of 4 lbs. arsenate powder and 2 pints of white oil per 100 gals. was used, there was a difference of about 2 per cent. more affected fruit than on the plot sprayed by the Departmental officers.

This is not a great deal of difference from a practical point of view, but is interesting data. On this same plot of Pears, in the previous season, more than 30 per cent. of the fruit was codling affected. The reason for better results this year is either due to better spraying or that less codling moth were about. The experiments are being continued this year and should prove enlightening.

The Agricultural Bureau system in South Australia has done a great deal towards having our problems reviewed and attacked by experts and scientists, and in the discussions that arise in the course of monthly meetings, growers meet to thrash out seasonal problems.

The Berri Branch paid a visit to the Block E and Chaffey Branch recently and resulted in a paper being read by Mr. Roy Moss which he had written about twenty years ago. Mr. Len Chappel contributed a short paper and dealt with the advances which had been made in the intervening years. **The advice given by Mr. Moss on methods of irrigation cultivation, manuring, and cover cropping are as applicable to-day as they were twenty years ago, the main difference being that the growing of cover crops depended upon a good Winter rain in the old days, whereas at the present day our irrigations are specially timed for the purpose of ensuring a cover crop.**

Mr. Len Chapple took the stand that although the cultural operations had not greatly changed in the last twenty years, with perhaps the introduction of ditching and burying cuttings, the main change centred around that of drying and processing, and in this respect we are indebted to the scientist for his experimental work. Mr. Chapple also mentioned the value of the soil survey of the irrigation settlements, which had been completed since Mr. Moss' paper was written. This survey had proved of inestimable value to growers and had it been made before the irrigation settlements were laid out, many of the problems that had to be now faced would not have arisen. Mr. Chapple considered it the greatest folly ever committed to survey an irrigation settlement without making provision for drainage.

At the conclusion of both papers, Mr. Bruce Davies (President of the Block E and Chaffey Branch) called on members for questions and a free discussion followed in an informal manner. The informality of this interchange of Bureau branches seemed to loosen the tongues of everyone who had anything to "get off his chest," and in this way many facts came to light which were eagerly taken up as a challenge or agreed to. In moving and seconding a vote of thanks to the Berri Branch, Messrs. D. Winder and C. Sowden agreed that the evening had proved one of the most entertaining and profitable for the year. The Barmera members have been so taken up with the interchange of branches idea, that they have invited the Block E and Chaffey branch to visit them early next month. Included in the tour is an inspection of their drainage system, and a visit to the Loveday pipeline system of irrigation which has not yet been established in any other irrigation area.

A PLUM-P BOY.

Mrs. Bjones: "I wish you would adjust your scales. I sent my little boy over to your shop to get two pounds of Plums and you only sent a pound and a half."

Shopkeeper: "Our scales are all right, madam. Have you weighed your little boy?"

DRIED FRUIT SECTION

COMMONWEALTH DRIED FRUITS CONTROL BOARD.

Fifteenth Annual Report.

Warning Against Increased Plantings.

THE FIFTEENTH ANNUAL REPORT of the Dried Fruits Control Board states that the production for 1938 was 91,687 tons, as compared with 37,217 tons in 1925. Exports totalled 75,257 tons, compared with 24,528 tons in 1925.

Although during recent years producers have done much to mitigate early **frost damage** and rain danger by greater attention and watchfulness, the vicissitudes of weather must always be regarded as a menace which can produce a variation of possibly £500,000 to £1,000,000, thereby introducing a gambling element in the industry, irrespective of the application of scientific methods. As production has been between 62,942 tons in 1936 and 91,687 tons in 1938, and it has been reported that a substantial increase in acreage is contemplated, the Board thought it advisable to record a warning against over-production.

In a letter to the Minister for Commerce, the Board stated that it considered that the maximum safe export of Currants to Great Britain from Australia should not exceed 15,000 tons per annum. Arising from this, it will be noted with an export of 55,000 to 65,000 tons of dried fruits available for Great Britain, that if provision is made in these figures for an export of 15,000 tons of Currants, that 45,000 to 50,000 tons of Sultanas and/or Lexias must be considered as a possible export surplus of such Raisins from the Commonwealth to Great Britain.

Having regard to the fact that 75,000 tons of Sultanas and Lexias of similar types are consumed in Great Britain, it would appear that 40,000 to 50,000 tons of Australian Raisins must, apart from shipments made from South Africa to Great Britain, provide approximately 53 to 67 per cent. of the British consumption, and that such is available from existing acreage.

While the Board might anticipate the ultimate realisation of such tonnage, **it looks with the utmost trepidation at any increased production,** as this must be directed to the British market. Because of the international situation and the production in other countries, the producer can look for no material consumption elsewhere.

Publicity work has continued throughout Great Britain under the direction of Mr. A. E. Hyland, Director of Australian Trade Publicity, and a considerable amount of work has also been carried out in Canada and New Zealand.

The chief expenses of the year have been publicity in the United Kingdom, £12,500; administrative expenses in Great Britain, £7,401/8/4; administrative expenses in Australia, £3,759/14/-; publicity in Canada and N.Z., £3,495/0/1; and scientific investigations, £1,500.

During 1938, the levy prescribed was 9d. per cwt. for Sultanas and Lexias and 6d. per cwt. for Currants. In 1939 a reduced levy of 6d. per cwt. on Sultanas and Lexias and 4½d. per cwt. on Currants.

The members of the Board elected at the biennial election were:—Mr. A. Yeates, O.B.E. (Western Australia), Mr. L. McLeod (New South Wales), Mr. H. D. Howie (South Australia), Mr. P. Malloch (Victoria), and Mr. E. J. Casey (Victoria). Members elected by the Commonwealth Government were:—Messrs. W. C. F. Thomas, C.B.E. (Chairman), J. B. Murdoch, and Alex F. Bell, C.M.G.

DRIED FRUITS QUOTAS.

The Consultative Committee of State Dried Fruits Boards, at a recent meeting, advised the adoption by each producing State of the following home consumption quotas for the year 1939:—Currants, 16 per cent.; Sultanas, 22 per cent.; Lexias, 51.5 per cent.; Prunes, 100 per cent.; Peaches, 70 per cent.; Apricots, 77.5 per cent.; Nectarines, 75 per cent.; Pears, 63 per cent.

The N.S.W. Dried Fruits Board has made a recommendation to the Minister for Agriculture that quotas be promulgated accordingly.

Similar recommendations have been made in the other producing States.

There was no exportable surplus of Prunes this year, the crop, with the carry-over for 1938, being sufficient for Australian requirements only.

The opening home consumption quotas for 1940 will, it is expected, be announced early in the new year.

VICTORIAN VITICULTURAL STATISTICS, 1938-39.

Nearly 42,000 Acres Are Under Vines.

A report to hand from the Victorian Government Statist (Mr. O. Gawler) states that the total production of gathered grapes for the season 1938-39 was 3,707,783 cwt., as compared with 4,897,257 cwt. in 1937-38. Of this total the estimated quantity used for making wine, etc., was 111,869 cwt., for making Raisins, Sultanas and Currants 3,514,128 cwt., and for table consumption 81,786 cwt. 825,056 gallons of wine were produced, 366,155 gallons of this being used for distillation purposes. 1,433,637 gallons were produced in 1937-38. 102,016 cwt. Lexias, 571,156 cwt. Sultanas, and 206,022 cwt. Currants were produced.

The report shows that there were 2,438 growers engaged in the industry, the cultivated area being 41,913 acres (of which 3,238 acres were not in bearing).

VICTORIAN DRIED FRUITS BOARD.

Growers' representatives on the Victorian Dried Fruits Board have been re-elected unopposed as follows:—Messrs. H. V. Davey (Red Cliffs), S. R. Mansell (Mildura), and A. Rawlings (Merbein), to represent Mildura; Mr. D. A. Cockroft (Woorinen), to represent Swan Hill and Kerang; Mr. D. E. B. Wood (Tongala East), to represent shires of Mildura, Swan Hill and Kerang and city of Mildura.

DRIED FRUITS CONTROL IN W.A.

In moving the second reading of the Dried Fruits Act Amendment Bill the W.A. Minister for Agriculture (Mr. Wise) stated that it was at present provided that the Act should remain in force until the end of March, 1940. The Act had been of considerable benefit to the industry, and it was considered desirable that its term should be extended. The Bill provided for the term to be extended for a further three years. The second reading was agreed to on the voices and the Bill passed through Committee without amendment.

DRIED FRUIT SALES IN W.A.

The W.A. Associated Dried Fruit Agents advise that they had decided to make a progress payment on November 15, on a differential basis on Currants and Lexias. This will amount to 1d. per lb. on top grade, ¼d. per lb. on second grade, ½d. per lb. on third grade, and ¼d. per lb. on fourth grade.

A previous payment of 1d. per lb. was made on Currants, but this will be the first payment on Lexias.

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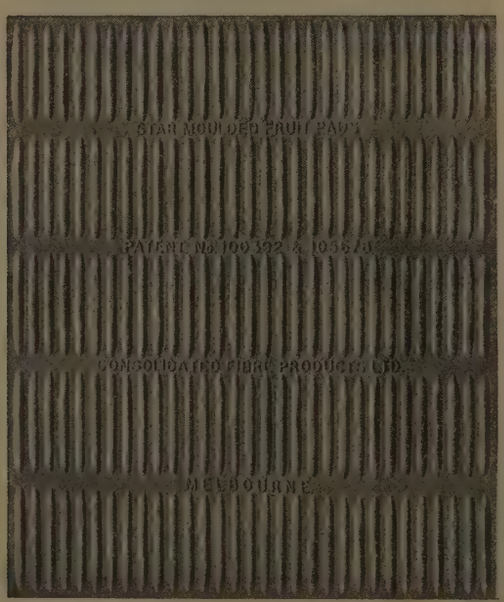

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Citrus Notes

CITRUS IN N.S.W.

THE LATEST REPORT from the Department of Agriculture states that in the Maitland district a good setting should follow the profuse blossoming, as beneficial rains have fallen over most of the area.

A good setting of Navels is anticipated in the Hawkesbury River district, as a very heavy blooming occurred. The majority of Valencias have been harvested; only in a few groves is any fruit to be seen.

Prospects are bright for a good setting of Valencias and Common Oranges. There is a light intermediate crop of Sevilles in some orchards.

Blossoming of Lemons and Mandarins was heavy; the fruit is setting well on the first-mentioned, and it is likely that there will be a very good crop of Mandarins.

Good to heavy blooming of citrus trees took place in the Windsor district. It is stated that many groves on the river flats are not as thrifty as desired, more particularly those on heavy soils. In some instances scald conditions are in evidence. It is rather early to determine the setting.

All Navel and Common Orange trees are in good condition in the Parramatta-Camden district, and they have blossomed profusely. The bloom on Mandarins was patchy, but on Lemons is was heavy.

The flowering of most citrus trees on the Murrumbidgee Irrigation Area is very good, but it is too early to assess crop possibilities.

About two-thirds of the Valencias have been cleared at Yenda, and harvesting is still proceeding at Leeton.

"RIVERLAND" TRADE MARK.

Adopted by Murray Citrus Growers.

Citrus growers in South Australia and the Mildura area have reached an agreement by which they will market guaranteed high quality fruit under a common brand. It is not desired that the well-known packing house trade marks be displaced, but rather with the idea of linking them all together under the over-riding grade mark of "Riverland."

WORLD CITRUS PRODUCTION INCREASES.

U.S.A. Produces Nearly One Half of the World's Citrus.

A recent United States Department of Agriculture Bulletin states that world Orange production has increased at the average rate of about eight million boxes annually during the last decade.

The expansion of Grapefruit has also been very rapid, U.S.A. increasing sevenfold during the last 20 years, while Palestine and South Africa have made similar or even more striking increases.

Lemon production reached its peak in 1932. Generally, increased production has kept pace with increased consumption, and prices now appear to be stabilising, making them within the means of the average person and profitable to the grower.

Although the U.S.A. produces nearly one-half of the world's citrus, not more than 10 per cent. is exported, and this is chiefly sent to Canada. United Kingdom is easily the largest importer of citrus, but Germany, France, Canada, the Netherlands, and Belgium are also important. Of recent years, imports from Empire countries, particularly Palestine and the Union of South Africa, have increased, and it would appear that exports from these countries will increase sharply during the next few years.

PALESTINE ORANGE EXPORT.

In a letter from Palestine dated October 17, 1939, some interesting sidelights are given regarding the export of Oranges from that country.

It is expected that Oranges could be shipped only to Mediterranean countries, England, and the western part of Norway. Conditions would be 8/6 for the fruit, 9/- for freight, and 1/- for insurance, per box—nearly £1 altogether for one box of Oranges, and freight pre-paid. It is expected that shipping space will be available for shipping by British boats, and the rest in Greek or Italian. England is the safest place under the circumstances, and one is at least certain that the money is safe if the fruit is sold.

Some companies lost a big amount of money in Poland, where they sold Oranges subject to a barter agreement, i.e., wood shooks.

THE MARKET GROWER

OFFICIAL ORGAN OF VEGETABLE GROWERS' SOCIETY OF VICTORIA, THE KOONDROOK & BARHAM TOMATO GROWERS ASSOCIATION AND THE SOUTH AUSTRALIAN FRUITGROWERS' AND MARKET GARDENERS' ASSOCIATION.

Vegetable Culture

The Effect of Free Interstate Trade :: Price of Potatoes Necessary to Cover Cost :: Care in Selecting Seed :: Cultivation of Celery, Turks' Caps, Marrows, and Citron Melons.

By Our Correspondent.

WHENEVER THE IMPORTATION of vegetables or produce from another State has the effect of reducing the local market price, it brings about much controversy among growers, as to the wisdom or otherwise of allowing free trade within the States.

This has been the case with Potatoes recently. Growers who grew Potatoes to mature and dig during the month of November had to pay from £18 to £20 per ton for their seed, and as is usually the case when seed is very scarce, much of this high priced seed was of inferior quality. This adds to the price of planting, for good crops cannot be dug from inferior and diseased seed. Thus, high prices must be obtained if the crop is to return the cost of production.

However, soon after these Potatoes started to dig, along comes a boat load of Delaware Potatoes from Western Australia, which causes the market to drop by £10 per ton a few days prior to the boat's arrival. In the market quotations for November 18 Potatoes were listed at £15 per ton, certainly a high price, but not high enough to repay men who planted their crops with seed at the very high prices which I have quoted previously.

It is without doubt the arrival of supplies from Western Australia which has brought the market down to this level, and no doubt the reduced price seems an injustice to some local growers.

However, I think, looking at the question from a broad angle, there is a great deal to be said for free trade between the States, for if growers in Western Australia can ship their produce all that distance and sell in competition with locally grown goods, they must be heavily over-supplied, or the local price is too high. Thus, as the seasons go round we find that our turn comes when we have an abundance of goods and are very glad to have the freedom of an open Australian market to help take off our surplus. **It is not the seasons when goods sell reasonably well that a grower has to worry about, but the times when there is an abundance of produce and very few local buyers.** Taking everything into consideration, I think that the open market is the best.

Potatoes for Seed

are very often not given sufficient attention as regards quality. Looking at the seed in a casual sort of way means that defects which make it impossible to get a good crop are overlooked, and often times disease which is inbred in the Potato cannot be detected by the closest examination and, unless the seed crop had been inspected when it was growing no indication of its weakness would be apparent to the grower who was planting the seed.

Some diseases, such as virus, are transferred from plant to plant during the growing stage, and it would take three years' culling to bring back to clean seed.

It always seems advisable to me to purchase seed only from a grower who is known to cull his plants during growth. Even if this means paying over market price for the seed it is eventually worth the difference, for in most cases this bad seed is not detected until the young shoot comes through the ground, and then, of course, the season for planting has been missed.

Celery

for the early crop should now be planted out. It is very necessary to have the ground in first-class order for this crop. To be successful it must grow well and fast from the day it is planted, and heavy top dressings of artificial manure such as blood manure are very beneficial as soon as the crop gets well struck. The crop must be frequently worked and watered if the weather is at all dry.

Take care to watch closely for disease, such as Aphis or Rust. If dusting to destroy Aphis, Nico powder should be used, and applied when the weather is warm. If dusting for Rust, Bordeaux mixture should be used, but the temperature does not matter for this powder. If this disease is showing at all, the crop should be dusted after every shower of rain, or a heavy dewy night.

If boards are to be used for bleaching a great many more plants can be planted to the acre. The old idea of mounding earth round the plant made it necessary to plant the rows at least six feet apart to give sufficient earth to pull up to the row, but in using boards for covering, two rows fifteen to eighteen inches apart can be planted, then leave four feet before planting the next two rows and follow on in this manner. The best type of boards to use are about eighteen feet long by eighteen inches broad, and one and a half inches thick. These can easily be stood up close to the plants when they are ready for bleaching, and a few stakes driven in on the outside to hold them in position.

Turk's Caps, Marrows, and Citron Melons may all be planted now.

If the Turks are to be watered while growing, the best system is to plant two rows three feet apart, leaving a hollow in between the rows down which the water may be run for watering. It is always best to water this crop with running water, rather than with sprinkling, for when the runners are in bloom the water from a spray seems to have a detrimental effect on the setting of the fruit, and you often find the young Turks set, and then go brown and drop off.

HUNGARIAN SCIENTIST STUDIES TOMATOES.

Dr. A. P. Fisher, a Hungarian agricultural scientist, recently arrived in Melbourne. Dr. Fisher was the first man to cultivate Tomatoes in the field in Hungary, and has spent 5 years working on a 38,000 acre estate. He will establish a small Potato and Tomato plantation in Victoria, and hopes to further his research work and improve the quality of the Australian Tomato.

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CANNED FRUIT NOTES — (*Continued from page 14*)

CANNED FRUIT EXPORTS.

THE FOLLOWING summary is a statement from the Australian Canned Fruits Board showing the export of canned fruits from Australia, from January 1 to October 31, 1939.

Country.	Apricots. Cases.	Peaches. Cases.	Pears. Cases.	Fruit Salad Cases.	Pine-apples. Cases.	Total. Cases.
U.K.	153,295	1,042,773	379,320	554	54,455	1,630,397
N.Z.	20,309	51,711	3,060	32	632	75,744
Canada	8,820	41,548	3,425	6,559	34,520	94,872
East	3,115	11,602	7,521	1,719	68	24,025
Misc.	874	1,674	2,317	75	601	5,541
Total	186,413	1,149,308	395,643	8,939	90,276	1,830,579

AUSTRALIAN CANNED FRUITS SALES.

The Australian Canned Fruits Board reported recently that sales of Australian canned fruits in the British market had reached a record of 1,550,000 cases this year, exceeding last year's total by 50,000 cases. Surplus stocks in Australia have been practically cleared.

Increased demands for Australian fruit have been influenced by the firming of prices for Californian fruits, following higher freights and exchange. Sales of Australian canned fruits to Canada have come up to expectations, and all available stocks of the quality required have been taken.

PURE FRUIT JUICES.

Demand Increasing in England.

The Tasmanian Agent-General in London (Mr. C. E. W. James) states, in his annual report to the Premier (Mr. Dwyer Gray), that there is a gradual development in England in the production of pure fruit juices. A group which had been engaged in this class of business in Europe, had left for Tasmania a few months ago, and arrangements had been made for them to inquire into Tasmanian conditions so that they might consider the possibility of establishing a similar industry in the State.

During the year a new Tasmanian product, a **Passionfruit liqueur,** had been placed on the British market.

A booklet to hand from Lawson's Fruit Exchange Pty. Ltd., Doncaster, Victoria, gives details of the pure fruit juices manufactured by them and bottled under the most hygienic conditions known. These juices—Apple, Pear, Grape, Quince and Pine-apple—contain no added water, no preservatives, and no added coloring, and are non-alcoholic.

VICTORIAN CROP PROSPECTS.

The Department of Agriculture advises on December 1 that no district will harvest a normal crop of Apples and Pears. Probably the best crops of Apples will be harvested in the Mornington Peninsula and parts of Gippsland and North-eastern districts. Even in these districts some varieties have failed, such as Delicious in the North-east, while the Jonathan crop in Gippsland may be only half normal.

The best crops of Jonathan Apples probably will be secured from the Mornington Peninsula, North-eastern and Bacchus Marsh districts.

On present indications

the Pear crop

in the Goulburn Valley and Rochester irrigation areas should be not more than 20 to 30 per cent. below normal. Elsewhere Pear crops will be medium to light, although good crops of the Packham variety are reported in some districts.

In the northern irrigation areas it is expected that quite good crops of **Apricots, Peaches and Prunes** will be harvested. Elsewhere the crops of these and other stone fruits are variable and mostly on the light side. Although Brown Rot of stone fruits is to be seen fairly generally, no serious losses have yet been reported. Those growers who failed to apply tar distillate in July for the control of Green Peach Aphis have had to use nicotine sulphate freely to keep that pest in check.

All varieties of

citrus

blossomed very heavily in the Swan Hill and Mildura districts. Lemons in the Doncaster district and Washington Navel Oranges in the Wangaratta district also blossomed well, so that the prospects for good crops of citrus fruit are much brighter. Quite large quantities of Valencias are yet to be forwarded from Mildura. At Swan Hill the Valencia crop is light and Lemons are scarce.

Vines seem to be setting a satisfactory crop.

Planting of Tomatoes in the Bendigo district was completed in November, the area planted being smaller than usual. It is likely that 200 acres of Tomatoes will be planted in the Pomonal district.

N.S.W. FRUIT CROP PROSPECTS.

From a report received from the N.S.W. Department of Agriculture early in November the following crop prospects were set forth—

Northern Tableland—Apples, light crop forecast.

Goulburn—Apples patchy, Delicious and Tasma and London Pippin range from poor to medium; Jonathans, Granny and Grav. poor to medium. Williams Pears appear good, but other varieties medium to poor.

Bathurst—Due to thrips as well as other causes, prospective crops of Pears have been reduced.

Orange — Apples generally medium. Rome Beauty and Granny Smith, medium to good. Pears, Pakenham, Williams and Beurre Bosc medium to good.

Young—Frost and hail caused certain damage. Granny Smiths and Jonathans patchy. Rome Beauty, Delicious and Statesman, medium to good. Prospects generally unsatisfactory.

Batlow—Fair crop of Apples and Pears indicated.

QUEENSLAND FRUIT CROP PROSPECTS FOR 1939-1940.

THE PRELIMINARY PROSPECTS of the coming fruit crops in Queensland are briefly set out hereunder by Mr. H. Barnes, Director of Fruit Culture.

The early Spring was very dry, and this had the effect of causing blossom and fruit shedding. The adverse early conditions have, however, since been followed by splendid rains, and fruit will in consequence be well up to size. In the Stanthorpe district deciduous fruit crops are light to medium only.

Apples and Pears: It is anticipated that the production of Apples and Pears will not exceed 150,000 cases—a 60 per cent. crop.

Plums: The crop is mostly light, due to late frosts occurring at blossoming.

Peaches: Medium crops.

Apricots: Light crops being harvested. Quality good.

Grapes: Medium crops. Many vineyards were affected by late frosts.

Bananas: The present good rains will have a beneficial reaction and crops should be well up to average.

Citrus: Light to medium crops on the coast, but heavy as usual at Gayndah.

Pineapples: Crop will again be heavy, possibly creating a new record.

Papaws: Medium to good crops being harvested.

Passionfruit: Medium to heavy crops expected. Many more growers are now producing this fruit.

Custard Apples: Crop should be heavy following good rains.

Avocados: Medium to heavy crops have set.

TASMANIAN FRUIT CROP.

Preliminary Estimate: Apples 4,750,000 bushels, Pears 225,000 Bushels.

Apples.

Preliminary reports received by the Tasmanian Department of Agriculture from the different centres indicate that Apple crops will be normal in the main Northern and Southern areas, South-eastern and certain elevated southern sections alone showing deficiencies. Alfriston, Cleopatra, Cox, Jonathan, and Sturmer are all consistently good, and Granny Smith particularly so. Crofton, Worcester and Scarlet are also well up to average whilst Delicious, Dunns, French Crab, and Democrat are patchy. Much now depends on weather conditions during the next two months, but insofar as present indications are concerned, the commercial crop may be estimated at 4,750,000 bushels.

Pears.

After the heavy crop harvested last year, a drop in Pear production was anticipated this season. Present appearances, however, suggest a crop this season in the vicinity of some 225,000 bushels. Of the various varieties, Josephine is outstanding with heavy crops in almost all districts. Glou Morceau and Beurre Bosc are the best of the remainder, with Comice patchy, but mainly light.

Stone fruits are variable, with Cherries mainly good, but Apricots light. Berry fruits have generally set well. Early Strawberries are on the market, but these, together with Raspberries and other berry fruits, would benefit with a period of warm, dry weather.

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Tasmanian Orchard Notes

THE FOLLOWING REPORT by the Chief Horticulturist of Tasmania (Mr. P. Thomas) has been received from the Minister for Agriculture, the Hon. T. D'Alton.

Weather and Crops.

In most fruit areas rainfall was below average and weather conditions for the blossoming of Apples were all that could be desired. At the present time, following a heavy blossoming on many of the leading varieties, the set appears to be good and **there are indications that the production will be at least equal to last year's crop of 4,500,000 bushels.** Such varieties as **Granny Smith, Jonathan** and **Democrat** look particularly well.

Amongst Pears, **Josephine** is outstanding in Huon districts, but other varieties are reported to be uneven in their setting and the prospects are for under the normal yield (275,000 bushels). One or two frosts were experienced, but insofar as can be ascertained at the present time damage is not of any consequence.

[N.B.—See later report on page 22.]

Cultivation and Spraying.

As mentioned previously, growers were somewhat behind with their normal cultivations, but during the interval this has been to a great extent remedied. No difficulty has been experienced in applying the necessary routine sprays, and most growers, though greatly handicapped through shortage of labor owing to military training, have got their spraying fairly well up to schedule.

The prevalence of Black Spot earlier in the Spring has been to some extent counteracted by improved weather and spraying conditions; nevertheless recent warm weather and heavy rain will undoubtedly renew the danger and precautions cannot be relaxed. Where spraying has been inadequate heavy infection has been noted.

In most areas Canary Fly is now at the right stage of development for control sprays of nicotine sulphate and these should be applied without delay. Codling moth is also on the wing and is being taken freely in suitable lure traps. Where arsenate of lead is being applied in combination with lime sulphur, growers are advised to use fine hydrated lime in the mixture at the rate of 2-3 lbs. to 100 gallons; risk of scorch will be reduced by this precaution.

Reworking.

The bulk of the grafting has now been completed. The season was shorter this year, but a considerable acreage covered in the time. It was thought that an impetus to this work would result in consequence of the uncertainty of world markets; recent developments have, however, had a counteractive affect, labor shortage also playing a part.

Schools' Packing.

For the W. H. Calvert shield at the recent Hobart Show there were 44 entries, comprising 264 cases of packed fruit, were staged in competition. The uniformity and presentation of last year's packs were again excelled and the Glen Huon State School secured the coveted trophy, with South Arm second and Nubeena third.

All cases were nailed up and marketed in Sydney at the close of the Show. In spite of the repeated handlings and delayed marketing of this fruit, excellent reports were received, both from the Tasmanian Government Marketing Officer and the agents concerned. The fact that from 10/- to 14/- per case was received is sufficient proof in itself of the reception they met with on the Sydney markets.

Stone Fruits.

Apricots planted in low or inadequately drained soils have suffered severely this season from the prolonged periods of wet weather. A condition similar to "sour sap" in Apples has been particularly troublesome, buds and young shoots dying off wholesale in many areas. It has not yet been ascertained to what extent crops will be affected. Despite the wet, cold conditions experienced at the blossoming period a fair set was evident in the majority of established orchards.

Peaches have suffered more from leaf curl this season than for some time past, and where spraying at bud movement was neglected, the foliage on such trees shows practically 100 per cent. infection. Nothing can be done for the present, and much now depends on the growth conditions during the next few months.

Berry Fruits.

Gooseberry crops are developing rapidly, and though the intense heat of recent days caused scorching on bushes in the warmer and drier districts, periodic good rains have kept them going. **Black Currants** have now almost finished flowering, and prospects are good. **Raspberries** in elevated and well-drained areas also promise well, and flowering has commenced. The earliest **Strawberries** are now on the market in small quantities, the sample being fair. Heavy rains have ruined many of the berries, both by rotting and soil splashing.

Hobart, 20/11/39.

(Further Tasmanian News on Page 32)

Western Australia

ACQUISITION OF CROPS APPROVED.

A representative meeting of fruitgrowers was held at Donnybrook (W.A.) recently to hear the W.A. Apple and Pear Board delegates explain the Commonwealth Government's scheme for the 1940 crop.

Mr. G. Parke stated that refrigerated space was not available for the normal export of 50 per cent. of the total crop, hence the necessity for Federal action and the control of marketing.

Mr. H. W. Soothill then explained that the Government would definitely acquire the crop from March, 1940, and he was of the opinion that it was the utmost in the way of assistance that growers could expect from the Government. Growers would first be required to register, then in January an assessment would be made and an advance would then be made on 75 per cent. of such assessment, as it was considered that this was an average percentage of the January crop that was finally marketed. An advance of 2/- per bushel case for Apples and 3/- per bushel case for Pears would be made on a basis of 60 per cent. payable on January 31, and 40 per cent. on March 31. After March 1 growers would be expected to take good care of their crop and prepare for marketing all extra fancy and fancy grades as required. The expense of picking would have to be borne by the grower, but all other expenses would be recouped.

Before March 1 growers could market any fruit without restrictions, provided that such varieties as early Jonathan, Cleopatras, Dunns, and normal exportable varieties were declared. After March 1 no fruit could be disposed of off the growers' property without permission.

The meeting finally passed a motion "cordially endorsing acceptance by the Australian Apple and Pear Board of the Federal Government's scheme."

Mr. A. P. Sharp said that growers and the industry had been treated generously.

On returning from a 6½ months' visit to Great Britain, Mr. M. J. Scanlan, of Scanlan and Simper Ltd., Fremantle, stated that South African feeling in favor of Great Britain had grown stronger since the offer of the British Government to buy more South African commodities.

Speaking of fruit production, and competition in Great Britain with Western Australia, he said he had been disappointed with the appearance of some of the W.A. Grapes in shop windows; such suffered in comparison with those from South Africa. Several complaints had been made re late shipments.

He was particularly pleased, however, with the appearance of **Apples,** and their popularity in Great Britain. He considered that **Jonathans** and **Granny Smith** in particular were excellent, Granny Smith being slightly better than those sent from the Eastern States.

FRUIT DRINKS IN W.A.

Apple Juice Recommended for Children's Hospital.

Inquiries are being made by the Department of Industrial Development as to the possibility of using quantities of West Australian fruit for fresh-fruit drinks, and efforts are being made to popularise fruit drinks already produced. Orange, Lemon and Passionfruit have been familiar for some time, but Apples, Pineapples, Strawberries, Grapes and Tomatoes are also used.

Among Apples it has been found that **Granny Smith** are the most suitable, a ton of Apples producing 125 to 150 gallons of juice. **Pure Apple juice is supplied to the Children's Hospital, where it has been found to be very beneficial in treating many ailments.**

Herbert Wilson Pty. Ltd.

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Cool Storage

VICTORIA.

Government Cool Stores at Victoria Dock.

Growers Urging the Immediate Rebuilding of the Burned Portion.

Subsequent to the fire at the Government Cool Stores, Victoria Dock, Melbourne, in January, 1937, when the fruit chambers were largely destroyed, a request was made that the £90,000 insurance money be held in trust for rebuilding purposes when necessary.

The Victorian Fruit Marketing Association took this matter up vigorously with the Victorian Government. A deputation, organised by the V.F.M.A. and supported by the Orchardists' Fruit Cool Stores Association, the Northern Victoria Fruitgrowers' Association, and other bodies, met the Minister for Agriculture, when a favorable reply was received as to the rebuilding of Victoria Dock Stores.

Subsequently, however, considerable opposition developed, principally from representatives of proprietary cool stores, who claimed that they had since provided sufficient storage space to handle the crops.

A meeting of the Cool Storage Investigation Committee was held; growers, however, are not satisfied that the figures presented properly reflect the situation. They urge the rebuilding of the Government Cool Stores because of the grave possibility of the Commonwealth Government requisitioning fruit cool stores for the purpose of storing meat and butter (as was done in the last war).

Because of the increase in the quantity of Apples and Pears to be consumed in Australia, extra cool space is required for continuity of supplies.

Although shipping space is not at the moment notified as available, there is always the possibility of vessels calling at Melbourne with certain refrigerated space available, and the cool store should be ready and available at the strategic point, i.e., the Victoria Docks.

The rebuilding of these cool stores is justifiable as a war emergency project: the need is very real and urgent.

APPLES AND PEARS IN COOL STORAGE.

Victorian Figures.

The following statement showing the quantities of Apples and Pears reported to be held in cool stores in Victoria on June 30, August 31, and October 31, 1939, has been released for publication by the Government Statist. The figures in parentheses refer to the previous season.

	June 30. Cases.	August 31. Cases.	October 31. Cases.
Apples	678,000	421,000	169,000 (186,000)
Pears	93,000	42,000	10,400 (8,500)

N.S.W. COOL STORES.

The following return, compiled by the N.S.W. State Marketing Bureau, shows the quantity of fruit reported to be in cool stores in N.S.W. as at September 30 and October 28, 1939, together with the quantities placed in and withdrawn from cool storage during the intervening period:—

Particulars.	Apples. Bushels.	Pears. Bushels.
Balance in storage from period ended 30/9/1939	187,307	3,629
Placed in storage during period ended 28/10/1939	6,885	168
Total	194,192	3,797
Withdrawn during period ended 28/10/1939	86,668	1,888
Balance in storage on 28/10/1939	107,524	1,909

TASMANIA.

From the latest returns available there were 147,000 cases of Apples and 500 cases of Pears in cold store in Tasmania on November 1, 1939.

A USEFUL HINT.

Grow Nothing Under 2½in.

Mr. J. M. Ward, Superintendent of Horticulture, Victoria, advises growers to do the necessary thinning to ensure that the Apples in the commercial crop will not be less than 2½in. in diameter.

Queensland

PREVENTING HOARDING OF FERTILISERS.

Bill Before Queensland Assembly.

The Premier of Queensland (Mr. W. Forgan Smith) recently introduced a Bill into the Assembly with the object of preventing the hoarding of fertilisers or the forcing up of their price and the utilisation to the fullest extent of available supplies.

Mr. Forgan Smith said the Bill was an emergency measure, the aim of which was to organise supplies of fertilisers with a view to supplying the essential requirements of Queensland primary producers. Difficulties would naturally arise in regard to certain types of fertilisers and certain chemicals used in the mixtures, and it was obvious that it might be necessary to ration supplies and also prevent hoarding with a view to preventing the forcing up of prices.

The appointment of Mr. R. P. M. Short as Under Secretary for the Queensland Agricultural Department has just been announced. The announcement was made by the Minister for Agriculture and Stock (Mr. F. W. Bulcock) after the meeting of the Executive Council.

Mr. Short has had continuous service with the Department of Agriculture and Stock for more than forty years.

[See further information on page 22.]

COOL FARM BUILDINGS.

Cheap Home-Made Bricks.

The attention of readers is directed to the advertisement in this issue of the Lightning Home Builder, an Australian invention of Mr. G. W. Mawman, by which bricks can be easily made on the farm from gravel, sand, rubble and cement. The block-making machine makes large bricks 18 x 8 x 6, with hollow centres, and any handy man can put up a store room, garage, fence or house at little expense and with little skilled labor.

Backing up Mr. Mawman's report that he has shipped large numbers of the machines to South Africa, a copy of the Farmer's Weekly (South Africa) which came to our office last week shows a poultry house built from blocks from a Lightning Home Builder machine made by Mr. Mawman. The farmer placed the bricks end-on for about 3 ft. 6 in. up, then side-on to the roof, thus giving a free passage of air without floor draught, suitable for fowls in a hot climate. The paper quoted it as entirely satisfactory. These machines are being extensively used in many parts of South Africa and in all Australian States.

The block-making machines can be seen in the showrooms of J. H. Rudd & Co. Pty. Ltd., 105 William-street, Melbourne, or at the factory at 149 Bay-road, Sandringham. In addition, other machines can be had for various designs for garden walls, garage walls, fencing posts and almost any form of cement block work. Illustrated pamphlets and quotes posted upon enquiry.

Picture of a South African poultry house composed of cement-sand blocks made with the Lightning Home Builder machine described above.
(Illustration by courtesy "Farmers' Weekly.")

Breeding New Fruit Tree Varieties

Results of Researches of a World-famous Horticultural Scientist.
Tree Breeding for Pest Resistance and Freedom from Fungal Diseases and Insect Pests.
Improving the Storage Quality and Color of Fruits.

VALUABLE INFORMATION is contained in the "Horticultural Abstracts" published quarterly by the Imperial Bureau of Horticulture, E. Malling Research Station, Kent, England.

A selection has been made of those dealing with the breeding of new varieties, and particularly those relating to the plant breeding of one of the world's most famous horticulturists, the Russian (the late) I. V. Mitchurin.

Hereunder are quoted briefly some of the findings.

A SUMMARY OF THE PRACTICAL RESULTS OF A BREEDER OF NEW FRUIT TREE VARIETIES.

Breeding for hardiness and good quality fruit were Mitchurin's main object. As a result of his work carried on for many years in Central Russia, in the course of which he admits to have made several costly and time-wasting mistakes, Mitchurin reached essentially the following conclusions:

1. All hybrids obtained from crosses between two closely related sorts of the same species are less adaptable to new environment. For instance, no hardy seedlings will be found among the seedlings obtained from the crosses between two non-hardy French Apple or Pear varieties grown in Russia. The results are even poorer when the seed of the non-hardy seedlings comes from the country of origin.

2. Most hybrids obtained from crosses between two different species or between two sorts of a single species but distant as regards their respective countries of origin are extremely capable of adapting themselves to new environmental conditions. Thus, a fine European variety, grown in Russia will be crossed successfully with a wild Russian Pear species, or an old cultivated Russian variety.

Among the seedlings resulting from such a cross there will be many individuals that are well able to adapt themselves to new environmental conditions, in this case to the severe cold in Winter. Of the hardy seedlings obtained in this way only such should be selected and reared in the nursery as have the most characters of both the cultivated species and the particular European parent variety.

In most instances, however, these characters are developed slowly and can only be distinguished when the seedlings attain a certain age.

Some Apple seedlings

require a particularly long time for the full development of inherited characters. Less patience is required to ascertain the characters of **Pear, Cherry, Plum, Apricot** and **bush fruit** seedlings, and with these plants the propagation of varieties with desirable characters can be started sooner.

3. The ability of the parent plants to pass on their characters to the progeny varies depending about all on the **individual properties of each individual plant.**

This ability is strongest in **all true wild species;** sorts of species developed long ago have a somewhat diminished ability to pass on their characters; recently developed sorts have a still more limited ability and, finally, the least capable of passing on parental characters and properties are hybrids from recent crosses between plants of two different species.

The age and health of the parent plants are also extremely important in this respect.

The technique used in cross pollination is described and brief notes are given on sowing and subsequent treatment of pome fruit and stone fruit seedlings.

A method for improving the health and vigor of the seedlings, especially of Plum seedlings, by feeding them with ammonia vapors through the foliage, consists of placing saucers filled with wet decomposing chicken manure between the rows of seedlings.

BREEDING RESULTS FOR 47 YEARS.

Dr. Grell's method for adapting plants to severe climatic conditions by grafting them to hardy stocks proved to be useless. **Mitchurin found that the only way to obtain hardy plants is to raise seedlings from seed obtained locally.** In a locality where there are no plants of a certain species available for hybridization with fine European varieties, wild forms growing in countries with a similar climate should be used as parents. Mendel's laws and the cell chromosome theory are regarded as useless, in their present form, for the practical breeder, particularly when he has to deal with perennial plants.

Soil conditions, rainfall, nutrition and many other factors exert a very strong influence on the development of characters inherited by the hybrids. Hence occasionally

entirely new characters

may be found in hybrid plants, e.g., the cross between Beurre Diel and Usuri Pear gave Mitchurin's Winter Beurre, **whose fruits are immune to bacterial and fungal rots.**

A great number of inter-specific crosses were made. A few hybrids were also obtained from inter-generic crosses. These may have originated without the union of the parental gametes and as a result of the pollen effect on other parts of the female organs than the ovary, which in its turn may have led to parthenogenesis. Genes of the healthier and of the older plants and of the longer established species are more likely to be passed on to the progeny.

A special method is described permitting hybridization of plants of different species or plants belonging to the same species, but only distantly related. It essentially consists of grafting scions, taken from several individuals of one species, to some of the branches of an approximately ten-year-old tree of the other species (future parent).

The scions are exposed to rootstock influence until finally both species flower simultaneously. At this point cross pollination is made.

No serious view should be taken if the cross pollination in the first year proves a failure, or the seed obtained in the year is non-viable, since this will not necessarily happen the next year.

The same method can be applied to annuals, in which case certain alterations will be necessary. Over

a hundred new hybrid

varieties have been obtained in this way. They include hybrids from the crosses between Apricot and Plum, Bird-cherry and Cherry, Russian Pear varieties and P. salicifolia, hybrids between different species of Walnut, Grape vine, Quinces, Currant, lily, hybrids between Pear and mountain ash, hybrids from crosses between distant Apple species, hybrids from crosses between Marrow and Melons, Water-melons and Melons, and many others.

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Practical hints are given to plant breeders on raising seedling hybrids from the seed. This section covers practically every point in seedling production and nursery practice, and includes notes on the choice of parents for seed, on feeding the seedlings by injection and on the use of so-called mentor effects.

SELECTION AS A MEANS OF OBTAINING PLANTS RESISTANT TO PESTS AND DISEASES.

Successful results were claimed by Mitchurin in breeding various fruits resistant to certain pests and diseases.

Currants: Large-fruited Black Currants resistant to Sphaerotheca mors uvae were obtained by crossing the English variety "Dukswing" with Ribes succirubrum.

Pears: Mitchurin's Winter Beurre, resulting from the cross between wild Usuri Pear (female parent) and Beurre Diel, is the sole Winter Pear variety in Central and Northern Russia. In addition to such desirable characters as regular cropping, good quality fruit, long storage life, etc., the variety is valuable on account of non-susceptibility to bark scalding, **tolerance of the flowers to morning frosts,** and immunity of the foliage and fruits to fungi and insects.

After mechanical injury of the fruits penetration of fungi and rotting is prevented by the formation over the wound of a corklike callus. It is noted, however, that no such protective tissue is formed when organic manure had been applied under the trees.

Grape Vines: Several hardy, non-chlorotic varieties have been developed, which can be grown as far north as Mitchurinsk, where there is no real danger of phylloxera and similar pests.

Tobacco: Under Crimean conditions Tobacco is very susceptible to Orobanche rots. In the search for hardy Tobacco varieties producing good quality leaf in districts other than the Crimea, a cross was made between a small-leafed Sumatra variety and an early Bulgarian variety. As a result a variety was obtained that **not only produced good Tobacco Leaf, but was also resistant to adverse climatic and soil conditions** of Central Russia and the Urals.

Apricots: It was found possible to select immune and hardy varieties which in the Mitchurin nursery did not require straw covering of the young shoots in Winter.

Cherries: An entirely new plant form was obtained from the cross between the Ideal Cherry hybrid and the pure species of the Japanese Cherry, Prunus Maaki. F.1 hybrids of this new form, which has been named Cerapadus, bear fruits containing large amounts of hydrocyanic acid as well as certain dyes required by the pharmaceutic and textile industry. The fruit of the F2 hybrids are quite sweet. **The foliage of the plants of both generations is toxic to insect pests.**

THE USE OF "MENTORS" IN RAISING HYBRID SEEDLINGS AND EXAMPLES OF DEFINITE CHANGES INDUCED IN FRUIT TREE VARIETIES BY VARIOUS EXTERNAL FACTORS.

An account is given of the remarkable way in which the character of young hybrids can be affected by artificial methods. Healthy six-to seven-year-old hybrid seedlings can be induced to

Crop Appreciably Earlier

by grafting their lower branches with a few scions taken from an older tree of a high yielding variety.

The scions of this mentor variety should be removed after the first crop, when it is not wished to affect the character of the fruit of the young hybrid seedling.

If, on the other hand, it appears desirable to add certain characters of the mentor's fruits to those of the hybrid, the scions of the mentor may be left on the tree for two or three more years. By that time the new characters will have become fully established in the hybrid seedling.

Control experiments showed that the use of mentors is always successful in inducing earlier cropping of hybrid seedlings.

In several instances it was possible to improve storage quality and color of the fruits and to increase the amount of sugars in the fruit flesh with the aid of mentors applied to the hybrid seedlings as late as one year after their first crop.

In two other instances hardiness was improved.

However, the use of mentors was not always successful, e.g., in one particular case it did not help to improve the appearance of the fruit of a certain Apple hybrid, or to reduce the drop of fruits which were of a particularly fine flavor, but extremely loosely attached to the stem.

Among different mentor effects the following are noted:—

(1) Early cropping was induced in a young Pear hybrid seedling but delay in removing the mentor scions resulted in loss of the character of early ripening.

(2) Working old Pear trees or old-established Pear varieties with scions taken from young trees of a new hybrid variety was useless.

(3) Transferring the pollen from old established varieties and older trees to the flowers of an Apple hybrid seedling had a marked influence on the fruit characters, before the seedling's own characters were fixed (five years after the first cropping year).

THE INFLUENCE OF CHERRY SEEDLING STOCKS UPON THE RIPENING DATE, YIELDING CAPACITY AND SIZE OF FRUITS.

Mitchurin noted that stocks not only affect the vigor and the degree of hardiness of Cherry trees, but have also a strong influence on the ripening date, yielding capacity and size of fruit.

[The foregoing are abstracts from the E. Malling Research Station, Kent, England, which Station advises that the complete volumes of Mitchurin's Selected Works are obtainable for the English equivalent of 12 roubles.]

POTATO PRODUCTION IN VICTORIA.

There were 34,396 acres under Potatoes in Victoria for the 1938-39 season, which yielded 81,415 tons, compared with 134,712 tons yielded by 41,105 acres planted in 1937-38, states the Victorian Government Statist. The first crop will yield fairly well, but there is a noticeable reduction in the area planted to the early main crop, indications being that a number of growers took advantage of the high prices ruling and disposed of an appreciable quantity of Potatoes which were expected to be used for seeding.

Supplies of old season's stocks are practically depleted. To the end of October a total of 65,111 tons of Potatoes had been passed for inspection, compared with 108,506 tons for the same period last year.

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There are 25 producing wells in Sumatra and the oil is brought to Australia in modern tankers specially built for this service. Those who have been privileged to see the company's movie and talkie films depicting this immense industry, have had a visual education of the enormous undertaking and the extreme care in producing motor spirit which is a feature of Vacuum service to motor users. Besides this, the company is in the forefront in developing oil research in Australia and New Zealand as a contribution to both peace time and war time conditions.

Fruit Prices in the Sydney Markets

SURVEY OF OPERATIONS FOR THE PERIOD OCTOBER 25 TO NOVEMBER 25, 1939.

(By L. T. Pearce, Market Representative, Fruitgrowers' Federation of N.S.W.)

UNSETTLED WEATHER conditions, accompanied by heavy rain, hail, and even snow, have been a feature of the past four weeks, and reports from the growing districts indicate that considerable damage has been done. Stories of hail strips ruining fruit and cutting trees have been more plentiful than usual, while some districts report excessive water saturation of the ground, so that not merely fruit, but trees have suffered. In the Young district, successive rains reduced the Cherry crops to anything but the thing of beauty it usually is, while in the Orange district, snow was experienced early in November and an undefinable amount of damage incurred. Weather conditions also have not been favorable to the regular purchasing of fruit.

Crop estimates from the respective fruit growing districts vary considerably, and no sooner have reports been submitted than the extreme weather conditions referred to upset the previous calculations and have made crop estimating much more difficult even than usual.

Summer fruits have been arriving steadily from the earliest metropolitan districts, **Cherries** appearing from the Camden-Picton district on October 20, **Apricots** from the Kurrajong district on the 27th, **Cherries** from Young on November 1, **Plums** on November 6, and **Peaches** on November 8. **Gooseberries** also appeared, while Queensland has commenced to forward both **Mangoes** and **Rock Melons.**

The appearance of all these fruits has made the period under review a most interesting one, all on the distributing side of the fruit industry being particularly interested in the increased turnover made possible after a long period of short supplies of fruit.

Citrus export since January 1 last to all ports, irrespective of size of case, has been as follows:—

	Cases.
Oranges	124,434
Lemons	8,110
Grapefruit	2,237
Mandarins	74

The New Zealand quota comprises 109,836 Oranges, 7,200 Lemons, and 1,206 Grapefruit.

Apples:

Around 64,000 bushels came from Tasmania, several thousands from Victoria, and a few from Western Australia, while steady releases were made of N.S.W. stocks of Granny Smith and other late types. Values have been remarkably firm, with a slight increase in price occurring and a greater preference for small sizes being evidenced. Tasmanian arrivals chiefly comprise Democrat and Sturmer, and Yates from Victoria.

Prices: Extra Fancy, Fancy, and Good—Crofton, Tas., 9/- to 14/- per bushel; Delicious, N.S.W., 9/- to 20/- (few to 24/-); Democrat (W.A. 9/- to 10/-)), Tas. and N.S.W., 8/- to 13/-; French Crab, Tas., 8/- to 12/-; Granny Smith (W.A. 12/- to 15/-), N.S.W., 10/- to 16/- (few to 18/-); Sturmer, Tas., 8/- to 12/-; Yates (N.S.W. 8/- to 14/-), Vic. and W.A., 10/- to 14/-; "D" grade lower.

Pears:

Only oddments of Pears have been available, these comprising a few Josephine from Victoria and recently a few Broom Park.

Apricots:

Some of the early types were extremely small, but better size in the fruit has recently been evidenced and good sales have been affected.

Prices: N.S.W., local, small 2/- to 4/-, medium 5/- to 7/-, special to 10/- per half bushel.

Bananas:

The Sydney market received 51,497 tropical cases during the past four weeks, N.S.W. supplying 40,383 and Queensland 11,114. The dry weather conditions experienced in the growing area earlier in the year resulted in much of the fruit being poorly developed and on occasions small sizes were difficult to clear.

Prices: N.S.W. and Q'land., regulation graded, first quality fruit—Six inch, seven inch, eight and nine inch, 11/- to 20/-, few higher per tropical case. Inferior lower.

Cherries:

Disastrous weather conditions have greeted the Cherry season in all districts. The Camden district early fruit was very satisfactory when rain interfered and ruined the last of this crop.

The Young district experienced cold weather, and fruit was not available until the beginning of November, while intermittent rain has caused much of the fruit to be unmarketable, and some of it unfit for human consumption after having reached the market. Various estimates have been made regarding the quantity of Cherries available, the Young crop being placed at around 25 per cent. of the normal crop, and the Orange district not very much greater. Values promise to be very high, owing to the scarcity of the fruit, but the poor quality available up to the present has caused values to be very little higher than usual.

Prices: Orange district, 5/6 to 7/- per quarter bushel; Young district, 4/- to 4/6, special to 7/- per quarter bushel case.

Citrus Fruits.

Grapefruit:

Californian Grapefruit has been available, counts 80, 100 and 126 costing 37/6 per Californian case. Only small supplies of the locally grown product have been available, some of it being second crop.

ROUGH HANDLING OF FRUIT IN SYDNEY.

Serious Complaint from Tasmania.

Speaking in the Tasmanian Legislative Council recently, Mr. W. H. Calvert, M.L.C., stated that the price of Tasmanian fruit was materially lowered in the Sydney market because of rough handling.

Cases of Apples, he said, were tossed about much more roughly in Sydney than in Hobart, and this careless handling meant serious loss to growers. He had stood on the wharf and watched new motor cars unloaded with the utmost care in order that the vehicles would not be scratched, while the fruit was hurled about like rubbish.

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Prices: N.S.W., local 8/- to 10/-, few 14/- per bushel; inland 10/- to 12/-, few 15/- per bushel, two bushel crates 15/- to 20/-; U.S.A., Calif. 37/6 per Calif. case.

Lemons:

Lemons have been more plentiful than is customary at this season of the year, when coastal districts are usually without fruit. As has been the case during recent months, much of this fruit is of an inferior nature, being thick in the skin and largely devoid of juice. Well colored fruit has been difficult to obtain.

Prices: N.S.W. local, colored 6/- to 14/-, green 6/- to 12/- per bushel, cured to 15/- per bushel; plain grade 3/- to 8/-; inland 8/- to 15/-.

Oranges:

Navels from this State and also Victoria were available at the end of October, but these were the last of the season's crop, values being around 10/- to 13/- per bushel. Valencias have at all times been less plentiful than usual, and an uneven level of prices at from 7/- to 12/- has been maintained. Supplies have been almost entirely from the coastal and metropolitan areas, the M.I.A. product being required for New Zealand.

Prices: Valencias, N.S.W.—local, count 80-113, 8/- to 10/- per bushel; count 125-180, 10/- to 12/-, few higher; count 198-234, 9/- to 11/-, few 13/-; smaller, 6/- to 8/-; plain grade lower; inland, 8/- to 12/-, two bushel crates 12/- to 16/-; Oranges, 2nd crop, 4/- per bushel.

Gooseberries:

This fruit came from the Young and Orange districts, but the crop is a lighter one than usual, and the small supplies from Tasmania that recently appeared were very welcome.

Prices: N.S.W. 6/- to 8/- per quarter bushel, Tas., 5/- to 6/-.

Mangoes:

A few Turpentine Mangoes have heralded the approach of the Mango season, but this type is not popular, and prices have only been at from 5/- to 7/- per half bushel.

Peaches:

Most early arrivals have been well developed, with sales averaging probably from 8/- to 10/- in most instances. The varieties that have been marketed have been chiefly King Edward, Governor Rawson, Watts Early and a few other types.

Prices: N.S.W., local, most sales 7/- to 9/-, special 10/- to 12/-, few to 14/- per half bushel.

Plums:

The first of the good types of Plums, namely, Wilson, appeared last week, up to 10/- per half bushel being obtained. Heavy consignments have been sent forward to the Brisbane market, where it is believed good values have been received. Tucker and Patterson types are also still available, these usually realising a few shillings less than the Wilson.

Prices: N.S.W., local, medium 4/- to 5/-, special Wilson 7/- to 9/-, few 10/-, small lower per half case.

Passionfruit:

There has been a dearth of this fruit, values improving to 26/- about the middle of November, when supplies from N.S.W. finished and the Queensland product started to come forward.

Prices: Q'land., 10/- to 16/- per half bushel; N.S.W., 10/- to 15/-.

Papaws:

These have been fairly plentiful, the total for the past four weeks being 3,228, almost a thousand cases being available last week.

Prices: Q'land., 4/- to 10/-, few higher per tropical case.

Pineapples:

28,318 tropical cases reached Sydney from Queensland during the past four weeks, and with these slightly smaller supplies values improved a little.

Prices: Q'land., 8/- to 13/- (few higher) per tropical case; N.S.W., 7/- to 12/-.

Cable Address: DAVIS, MELBOURNE. Code: "ABC," 4th and 5th Editions. Box, G.P.O. 148B.

J. DAVIS PTY. LTD., *Fruit Merchants*

8 WHOLESALE FRUIT MARKET

Consignments solicited. One Trial Invited. Best Prices obtained. Prompt Advice and Payment.
Telephone, F 3232. Bankers: The National Bank of Australasia, 271 Collins Street, Melbourne.

Telegraphic Address: "Listeria," Melbourne. Telephone: F 6341. Private: Win. 4535.

Codes: Bentley's A.B.C 5th Edition. **IMPORTANT TO GROWERS** Box 555D, Melbourne.

Australia looks to you to produce and sell good fruit, but to **PRODUCE GOOD FRUIT** and have it badly sold is a reflection on your business ability. To sell well is as important as to produce well. The greatest combination that can exist beneficially is that between a painstaking fruitgrower and a painstaking salesman.

If you have good fruit to market, you will find in the firm of **GEORGE LISTER PTY. LTD.** the service you require. Established over 50 Years.

GEO. LISTER PTY. LTD. 12 Wholesale Fruit Market, Franklin Street, Melbourne.
(Managing Director: J. R. VAIL) Bankers: The Commercial Banking Coy. of Sydney Ltd. (Melbourne Branch).

Silbert, Sharp & Davies
Pty. Ltd.
FRUIT MERCHANTS
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'Phone: F 2287.

CONSIGNMENTS OF FRUIT AND VEGETABLES
Assured Highest Market Rates.
P. A. PATRIKEOS
36 Wholesale Fruit Market
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Telephone: F2227.

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EXPORTERS AND IMPORTERS
Specialty—Prompt Returns. Cheques every Wednesday. Phone: F 1862

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Prompt Returns and Sales Notes Daily
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G. WOOLF
29-30 Wholesale Fruit Market
WHOLESALE FRUIT MERCHANT
& COMMISSION AGENT
Telephone: F 5550.

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Wholesale Fruit Merchants,
20 Wholesale Fruit Market, Melb.
CONSIGNMENTS OF FRUIT AND VEGETABLES SOLICITED.
Tel.: F1023; Private: JW2528.
Bankers: E.S. & A. Bank, Market Branch.

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26, 36 Wholesale Fruit Market, Melbourne. And at VICTORIA MARKETS.
COUNTRY AND INTERSTATE ORDER TRADE SUPPLIED.
SHIPPING No. 41. PROMPT SETTLEMENTS. CONSIGNMENTS SOLICITED.
PHONE: F 4370. Bankers: Bank of Australasia, Melbourne.

Regular Supplies of Quality Fruit well Packed and Graded will realize the Best Prices.

H. LOUEY PANG & CO. PTY. LTD.
FRUIT AND PRODUCE MERCHANTS
No. 4 WHOLESALE FRUIT MARKET, MELBOURNE
G.P.O. Box No. 795F, Melbourne.
References—E.S. & A. Bank, 225 Swanston St., Melbourne.
Telegraphic Address: "PANGANCO." GOOD PRICES ASSURED
Cheques Sent Promptly. F 6532.

Tim Young & Co. Pty. Ltd.
WHOLESALE FRUIT MERCHANTS
18 Wholesale Fruit Market

Growers can be assured of receiving the very best service and prompt returns.

Cable Address "TIYOUNG"
A.B.C. Code, 5th Edition.
Box 28a, G.P.O., Melbourne.
TELEPHONE, **F 4321**
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Telephones: F 4394 (After hours) F 5575 SHIPPING NO. **91** Telegrams and Cables: "PAXINOS," Melbourne.

D. S. LUCAS & CO.
Accredited Selling Agent S.A. Tomato, Celery, and West Australia Tomato Association. Fruit and Banana Merchant, Importer and Exporter, and General Commission Agent.
PROMPT RETURNS. £1,000 FIDELITY BOND.
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H. & S. FRANKEL
(Established 35 Years)
No. 44 WHOLESALE FRUIT MARKET, MELBOURNE.
Growers in all States are invited to send consignments. Highest market rates and prompt settlements.
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Commonwealth Bank of Australia.
"Growers' Interests further protected by our Fidelity Bonds."

A. E. PITT
Established 1893.
Member of Wholesale Fruit Merchants' Association of Vic.
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Consignments Solicited from all States.
Growers Will Receive Top Market Value and Prompt Returns.
Fidelity Bond Guarantee for £1,000
Pea and Bean Stands,
11 and 12 Victoria Market.
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Phone: F 5035.

Producers' Co-operative Distributing Society Ltd.

Are now paying a Bonus of 15% on all Commissions charged to regular clients of the Fruit & Vegetable Section for year ending Sept., 1938

Send Your Consignments TO US

MELBOURNE & SYDNEY.

Rock Melons:

Nominal values for Rock Melons are 10/- to 15/- per bushel, only a few having appeared up to the present from Queensland, and some of them being rather immature.

Strawberries:

Various districts in this State are forwarding small supplies, but frequent showers of rain and heavy inundations on occasions have caused considerable damage to the Strawberry crop.

Prices: N.S.W., 6/- to 10/-, few 14/- per dozen punnets (nominal price only).

Tomatoes:

Early in November the supply of Tomatoes increased, and by the middle of the month values had eased considerably. Queensland forwarded 107,770 half cases during the four weeks under review, as many as 42,000 half cases arriving in the one week, and unfortunately in that same week it is estimated that the Central North Coast of this State forwarded more than 10,000 half cases, while the locally grown glasshouse product was also available. The market became very depressed for a few days, and the Queensland green product was under offer at 2/- and 3/- per half bushel. North Coast fruit has recently met with competition from locally grown Tomatoes, and the public is now purchasing at the very attractive price of 3 lbs. for 1/-.

Prices: N.S.W., local 3/- to 7/- per half bushel, North Coast 4/- to 8/-, few to 10/- per half case, hothouse 9/- to 12/- per half case, glasshouse 4/- to 8/-; Q'land., Southern Q'land., 2/- to 5/- per half case; repacked, 6/- to 10/-.

QUEENSLAND.

Brisbane (21/11/39). — Messrs. Clark & Jesser report as follows:— During the past month values for most lines have been very good, and citrus fruits have met with an exceptionally good demand. Ruling values at present are as follows:— Apples: Yates and Democrats, 14/- to 15/-; G. Smiths, 16/- to 17/-. Oranges: Vals., 14/- to 15/-. Pears: Best varieties, 15/- to 17/-. Lemons, 15/- to 16/-; Cherries, 10/- to 12/-; Apricots, 14/- to 15/-; Mangoes, 6/- to 7/-; Papaws, 4/- to 5/- dump case. Tomatoes, 4/- to 5/-; Cabbage, 9/- to 10/- per dozen; Peas, 8/- to 9/- per bushel; Beans, 10/- to 12/- per 28 lb. bag; Sweet Potatoes, 9/- to 10/- per cwt.; English Potatoes, 10/- to 11/- per cwt.; Pumpkins, 6/- to 7/- per cwt.; Carrots, 10/- to 12/- per cwt.

SOUTH AUSTRALIA.

During November prices for most produce had a firming tendency. Bunch and green vegetables realised higher prices, but Onions and Potatoes, owing to heavier supplies, eased considerably in price.

Apples, with decreasing supplies, again firmed in price. **Cherries** made their appearance during the month, and had a ready sale. **Apricots** from the River districts were also marketed, and had a good sale. **Tomato** prices, owing to heavier supplies, fluctuate over the month, but a good demand was experienced throughout.

The undermentioned quotes ruled on Monday, November 27, 1939:— French Beans, 5/- doz. lbs.; Beetroot, 1/6, 2/- doz:; Cabbages, large 5/- doz., small 3/- doz.; Carrots, 2/-, 2/6 doz. bch.; Cucumbers, 2/-, 4/- doz.; Cucumbers, Apple, 2/-, 4/- doz.; Leeks, 2/- doz.; Lettuces, 1/6, 2/- doz.; Onions, new, 4/-, 5/- cwt.; Parsnips, 2/- doz. bchs.; Peas, 6/-, 7/- bushel; Potatoes, 12/- cwt.; Pumpkins, 5/- doz.; Rhubarb, 1/- doz. lbs.; Tomatoes, 9/- firsts ½ case, 8/- secs. ½ case; Trombones, 5/- cwt.; Turnips, 2/-, 2/6 doz. bchs.; Swede, 2/-, 2/6 doz. bchs.; Vegetable Marrow, 4/-, 5/- doz.; Triambles, 6/- cwt. Apples: Jonathans 12/- case, Romes 11/- case, Statesmen 12/- case; Apricots, 7/- ½ case; Bananas, 22/-, 24/- crate; Cherries, light 7/-, 8/- ½ case, dark 9/-, 14/- ½ case; Gooseberries, 4/-, 4/6 ½ case; Lemons, 23/-, 30/- case; Loquats, 5/6, 6/- case, "Enormity" 6/-, 8/- case; Common Orange, 12/- case; Pineapples, 15/-, 18/- case; Strawberries, 8/- doz. lbs.

VICTORIA.

Melbourne (29/11/39). — Trading quieter owing cool weather. Cherries more plentiful; prices easier. Wholesale Fruit Merchants' Association prices:—Per Case: Apples, eating, 5/-, 6/-, large; do., cooking, 6/-, 10/-. Apricots, half case, 6/-, 8/-; choice higher. Bananas, double case, 13/-, 21/-. Cherries, New South Wales, 4d., 5d. lb., few higher; S. Aust., 5d., 6d., few higher. Cucumbers, 8/-, 10/-, few higher. Grapefruit, 7/-, 15/-, selected higher. Lemons, 8/-, 17/-, selected higher. Valencias, 8/-, 14/-, selected higher. Passionfruit, 8/-, 20/- half case. Peaches, best, to 10/- half case. Papaws, 7/-, 10/-. Pears, 6/-, 10/-, few higher. Pineapples, 9/-, 14/-. Tomatoes, S.A., best, 13/-, 14/-; local, ripe, 16/-, few higher, case; green, best, to 10/-.

NEW ZEALAND.

Dunedin (10/11/39). — Messrs. Reilly's Central Produce Mart Ltd. report as follows:—

Fair supplies have been coming to hand during the week. Good quality Apples ex cool store continue to bring high values. Dessert Pears are in short supply, with an excellent demand.

Supplies of local hothouse Tomatoes are increasing, while supplies of Christchurch have been smaller.

Australian Oranges are sold out of wholesalers' hands, and it will be approximately a fortnight before further supplies are available.

N.Z. Lemons are now getting in short supply, and weekly shipments are being received. A further shipment of Californian Grapes are due to arrive this week.

A shipment af Samoan Bananas was received at the beginning of the week. Supplies are short of requirements, with ripe fruit available from next Monday.

Prices (per case): Cal. Grapes, Ribiers, 42/6; N.Z. Lemons, fancy, 8/6 to 19/-; Australian Valencias, 21/- to 27/-; Bananas, ripes, 22/6. Apples: Del., 14/- to 18/-; Tasmas, 10/6 to 12/6; Sturmers, 12/- to 16/-; Rome Beauty, to 10/6; Statesman, 10/6. Queensland Pineapples, 25/- to 33/-. Pears: Winter Coles and Nelis, 13/6 to 15/-.

TASMANIA.

The Tasmanian Orchardists and Producers Ltd., Hobart, earned a profit of £2,013 in the year ended September 30, 1939. A dividend of 10 per cent. was declared.

N.S.W. Railways Rates for the Carriage by Passenger Train of Fresh Fruit and Vegetables

UNDER the N.S.W. Government Railways By-Law No. 945, effective from October 1, 1939, the rates for the carriage by passenger train of fruit (fresh) and vegetables (green) are specified as:—

(1) When cheaper than Half Stamped Parcels (Prepaid) Rates on the bulk weight, the rates for fruit (fresh), Asparagus, Beans (green), Brussels Sprouts, Cabbages, Cauliflowers, Celery, Cucumbers, Cress, Lettuce, Parsley, Peas (green), Radishes, Rhubarb, Spinach, Spring Onions and Tomatoes, packed in wooden cases, strong cardboard containers or in tins enclosed in wooden cases, carried by passenger train at the convenience of the Commissioner for any distance within the State, will be:—

	Each. s.	d.
Standard two-bushel case or container	2	9
Case or container not of standard capacity weighing from 57 lb. to 112 lb.	2	9
Standard bushel case or container	2	0
Case or container not of standard capacity weighing from 29 lb. to 56 lb.	2	0
Standard half-bushel case or container	1	0
Case or container not of standard capacity weighing from 15 lb. to 28 lb.	1	0

Two or more cases of standard capacity securely fastened together which do not exceed the capacity of a standard half-bushel or standard bushel case will be charged for at the half-bushel case rate (1/-) or bushel case rate (2/-), respectively.

Two or more cases not of standard capacity securely fastened together which do not exceed 28 lb. or 56 lb. in weight will be charged for at the half-bushel case rate (1/-) or bushel case rate (2/-), respectively.

(2) Fruit and vegetables specified in Clause 1, when packed in tins, or in cases not of standard capacity exceeding 112 lb. in weight, will be charged for at Half Stamped Parcels (Prepaid) Rates.

(3) The maximum rate for one wooden case of **fresh fruit** not exceeding quarter-bushel size, consigned **direct from grower to consumer**, and forwarded any distance within the State at the convenience of the Commissioner, will be 9d.

(4) Freight must be prepaid when consigned to an unattended station. When freight is booked "to-pay" to a station where there is an Officer-in-Charge, an additional 25 per cent. (not to exceed 1/-) of the total freight will be charged. This additional charge will not apply when a consignment is despatched from a station at which Parcels Stamps are unprocurable.

[The foregoing is quoted from the November monthly review of the State Marketing Bureau, N.S.W. Department of Agriculture.]

Leading Agents in the

BRISBANE FRUIT MARKETS

Highest Prices. **A. S. BARR** Prompt Returns.

FRUIT EXCHANGE, BRISBANE, QUEENSLAND.

Wholesale Fruit Merchant and Growers' Agent.

A Trial Solicited. Returns Speak for Themselves. Shipping No. 19.
Established 1888. Registered Telegraphic Address: "Barr, Brisbane."

W. Arkell & Sons Estab. 1892

BRISBANE, B.12. GROWERS' AGENTS.

Shipping No. 12

Bankers: National Bank of Australasia, George St., Brisbane.

MURRAY BROS

CONSIGNING NO. 22 BRISBANE

SECTIONS 5, 41, & 42 ROMA ST. MARKETS

Do not run any Financial Risk with your Fruit but Consign it to

HEDLEY GEEVES PTY. LIMITED

Telegraphic Address: "Apples, Brisbane." (Hedley Geeves, Managing Director) Registered Shipping No. 6.

FRUIT EXCHANGE — BRISBANE

SELECTED AGENTS FOR: Phones: Office B 6218. Residence J 3445. Established 1911.

Victoria: Harcourt Fruitgrowers' Progress Assn. Ltd.
Harcourt Fruit Supply Co. Ltd.
Victorian Central Citrus Assn. Ltd.

Tasmania: State Fruit Advisory Board.
New South Wales: Griffith Producers' Co-op. Co. Ltd.
Batlow Packing House Co-op. Soc. Ltd.

N.S.W. VEGETABLE INDUSTRY.

Marketing Director Tells of Chain Store Successes in U.S.A.

Archaic, Out-of-Date Methods in Sydney.

IN his address at the Seventeenth Annual Conference of the Agricultural Bureau of N.S.W., the Director of Marketing, Mr. A. A. Watson, stressed the need for organisation in the vegetable-growing industry. Apparently vegetable growers on the whole were very apathetic as to the importance of their industry in the economic life. One exception was the Sydney Market Gardeners' Association, comprised of Australian market gardeners. This body, which had been in existence for about 40 years, dealt chiefly with matters in reference to the City Vegetable Market.

It was also noted that few of the many Italians, Maltese and other foreign-born Europeans who had commenced in the industry were to be found in any organisation known to Mr. Watson. It was hoped that when these newcomers become more familiar with our language they would become nationally and industrially Australian.

In addition to the Sydney Market Gardeners' Association, organisations of vegetable growers affiliated with the Vegetable Growers' Association of N.S.W. were to be found in various districts.

Chain Stores.

Continuing, Mr. Watson stated that recently there had been talk of fruit and vegetable chain stores in Sydney. He then gave facts obtained from an official Departmental bulletin, obtained from Washington, U.S.A. The brochure dealt with forty cities in the U.S.A. where these chain stores were conducted; they range from Jacksonville, Florida, with a population of 135,000, to Chicago, 3,376,000, and New York, 6,930,000. In these 40 American cities 158 chain fruit and vegetable store systems operated between them no less than 18,174 shops, or an average of 115 shops per chain store organisation. Thus New York had 11 chain-store systems operating 1,400, 683, 650, 638, 550, 125, 35, 15, and three with four shops each; Jacksonville had six chain store systems operating 50, 30, 24, 9, 8, and 4 shops. It is stated that 23.1 per cent. of the total receivals of fruit and vegetables in those cities is handled by the chain stores. Thus it must be considered that buyers for such huge chain-store organisations would not be content with intermediaries and would look for direct buying.

Mr. Watson then emphasised that he expressed no opinion as to the merits or demerits of fruit and vegetable chain stores. The most he could or should say was to point out that there are archaic, out-of-date features associated with existing procedure, and that the law of change, to which all human interests are subject, will inevitably overtake Sydney's methods of wholesaling and retailing fruits and vegetables.

At intervals of about three years, concluded Mr. Watson, returns were made of all fruit and vegetable shops and stands in the Sydney metropolitan area. The last return showed 1,384, about 90 per cent. being shops. These provided the existing facilities for retail distribution of fruit and vegetables in Sydney.

FRUIT AND VEGETABLES FOR SYDNEY.

Substantial Interstate Trade.

A report furnished by the N.S.W. Director of Marketing states that during September, 1939, a total of 1,377¼ tons of vegetables were imported into New South Wales. These included 99,136 bags of Potatoes, 2,622 of Onions, 2,098 or Swedes, 1,359¼ tons of Pumpkins, 1,956 cases of Cucumbers and Chillies, and 18½ tons of other vegetables.

Fruit imports were as follows:—

State.	Pineapples. Tropical. Cases.	Bananas. Tropical. Cases.	Other Fruit. Cases.	Tomatoes. Half-bushel Cases.	Totals. Packages.
Queensland	29,040	14,317	7,723*	79,061	130,141
Victoria	7	124	9,742	4,769	14,642
Tasmania	—	—	116,510	—	116,510
Sth. Aust.	—	—	1,852	705	2,557
West. Aust.	—	—	8,565	8,873	17,438
Totals	29,047	14,441	144,392	93,408	281,288

*Also 3,953 trays Strawberries.

N.S.W. BANANA GROWERS.

Marketing Canvassers Not Desired.

Amendment to Farm Produce Agents Act Sought.

Speaking at the annual meeting of the Banana Growers' Federation Co-operative Ltd., Mr. H. A. Stevenson, Chairman, said he was sure agents would agree to the prohibiting of canvassers. It had been estimated that expenses of canvassers in the Bean and Pea market aggregated more in one season than the amount which growers were entitled to charge as commission.

A motion and other endorsements were carried, calling on the Government to treat as urgent the Commissioner's suggested amendments of the Farm Produce Agents Act.

VICTORIAN ONIONS.

Globes £5/15/- a Ton.

The Victorian Onion Marketing Board has fixed the price of Brighton Globe Onions at £5/15/- a ton delivered into store, Melbourne or Geelong. Growers of early Globe Onions, generally known as Brighton Globes, are permitted to dispose of their produce to any one of the approved agents of the Board, who are required to make the Board deduction of 3/- a ton. A list of authorised agents will be announced early in December.

NEW ZEALAND EXHIBITION.

Comprehensive Australian Exhibit.

The Australian exhibit at the New Zealand Centennial Exhibition in Wellington depicts the life and industries of the Commonwealth. Costing approximately £47,000, the exhibit is about 250 ft. long and 50 ft. wide.

Attractions include a cinema hall, where films of the wine, dried fruits, canned fruits, wool, and wheat industries, etc., will be shown, an art section representing about forty-nine leading artists, Australian literature, photographic representation of leading musical figures, photographic studies of all types of Australian buildings, and choice examples of photographic art and primitive art.

The primary produce section contains four brilliantly colored transparent photographs of typical industries—wheat, wool, and cattle—while a further picture shows the huge Hume Irrigation Dam, which has a surface area three times that of Sydney Harbour. Adjacent to this is a series of four showcases depicting canned fruits, dried fruits, citrus fruits and wine—commodities in which the New Zealand public is specially interested.

Mr. Ulrich Ellis has been in charge, representing the Department of Commerce, together with Mr. C. H. Holmes, of the Australian National Travel Association. The Manager of the Pavilion is Mr. C. E. Critchley, M.B.E., and Mr. W. J. H. Wilcox is acting as Supervising Officer.

The architects are Stephenson and Turner, of Sydney and Melbourne.

HOME NOTES.

To remove fruit stains from linen dip the linen in sour buttermilk and dry in a hot sun. Then wash it in cold water.

Never put Potatoes on the table in a covered dish. They will absorb their own moisture and become soggy

Stained ivory may be cleaned by the application of a paste made of whiting mixed with Lemon juice. It should be left on for several hours. and, after removal, polished with a soft cloth.

Bicarbonate of soda added to milk in warm weather will keep it sweet. A pinch added to water in which greens are boiled will keep them a good color. A pinch will remove stains from enamelled saucepans if placed in the water boiled in them. Silver goods rubbed with a chamois on which a little is sprinkled will look like new.

Badly scorched fabrics should be rubbed lightly with white flannel wrung out of cold water and damped slightly with glycerine. If the glycerine leaves a mark, sponge out with alcohol.

When new crockery is bought, prepare it for its career and extend its life by putting it into a container of cold water; then bring the water to the boil, and leave the crockery in it till the water is cool. It is a precaution against cracks and heavy-handed kitchenmaids.

If you have to make breadcrumbs with fresh bread, shake in a very little dry flour and the bread will then crumble easily.

If difficulty is experienced with whipped cream, add one white of egg and stand the basin in a vessel of cold water for one hour. This brings success, and the white of egg will increase the bulk without altering the flavor.

If boiled starch is stirred with a candle instead of a spoon a better gloss will result.

SPECIAL NOTICE TO FRUITGROWERS

All Members under Fidelity Bond

In response to numerous requests from growers for information as to who are members of the

Wholesale Fruit Merchants' Association of Victoria

the following list is given. All are members of the above Association, and are registered firms carrying on business in the

WHOLESALE FRUIT MARKET, MELBOURNE.

STAND NUMBERS ARE AS INDICATED IN PARENTHESES.

T. STOTT & SON PTY. LTD. (26-36).
H. L. E. LOVETT & CO. (23).
A. E. PITT (14).
J. DAVIS PTY. LTD. (8).
W. S. TONG (31).
SILK BROS. PTY. LTD. (24-25).
J. G. MUMFORD (35).
GOLDEN VALLEY FRUIT CO. PTY. LTD. (15).
J. W. ROSS (13).
H. M. WADE & CO. (21).
DAVID SMITH PTY. LTD. (3).
SILBERT SHARP & DAVIES PTY. LTD. (17).
WATKINS FRUIT COMPANY PTY. LTD (5)
G. WOOLF & SONS (29-30).
R. CORNISH & SONS (5).
J. HYMAN & SON (51).
HERBERT WILSON PTY. LTD. (10).
FRANK BOOTH & SONS PTY. LTD. (16).
GEO. LISTER PTY. LTD. (12).
TIM YOUNG & CO. PTY. LTD. (18).
F. W. VEAR PTY. LTD. (28).
YEE HOP LOONG & CO. (32).
H. LOUEY PANG & CO. PTY. LTD. (4).
WING YOUNG & CO. (38).
D. MENTIPLAY & CO. PTY. LTD. (27).
PRICE & KING PTY. LTD. (2).
REGAN & KENNY (Successors to Wm. Sweeney). (33).

Correspondence is invited by the Association.

Office : 21 Wholesale Fruit Market, Queen Street, Melbourne. Phone: F 4866.

Pig Rearing

Artificial Feeding Where the Pigs Are Without the Sow.

Importance of Cleanliness.

If newly born pigs which are deprived of the sow's care are taken in hand as soon as they are deprived of the sow's milk, there is a very good chance of the pigs being reared successfully by artificial feeding. If they are left too long without sufficient food, however, they become weakened and difficult to rear.

Sometimes a large litter is divided into two lots, and each lot is put with the sow separately for a drink at frequent regular intervals. Although this entails a lot of attention, it gives satisfactory results. Foster mothers are sometimes available, and a sow with a small litter may be given some pigs from another sow, provided they are about the same age as her own.

When hand feeding is resorted to, the pigs should be given a warm, dry, clean, and comfortable pen, with access to clean pasture, so that a supply of minerals and vitamins are assured. A moveable shed in the run is very convenient.

Method of Feeding.

The following method of feeding has given very good results with pigs taken from the sow when a day or two old:—Start the pigs on whole cow's milk fed warm and as fresh as posible, six times daily. After three weeks the whole milk may be gradually replaced by separated milk, and the six feeds daily may be gradually reduced to three feeds daily. When the change from whole to separated milk is being made, a trough of a day meal containing 90 per cent. of pollard, bran, maizemeal or wheatmeal, and about 10 per cent. of meatmeal should be kept in the pen with food always available to the pigs. This trough must be sheltered and kept dry. A constant supply of drinking water should also be kept before the pigs when they are given the dry food.

Teaching Young Pigs to Drink.

The bottle and teat are neither necessary nor desirable in teaching the young pigs to drink. A shallow dish serves the purpose well. Place the warm milk in the dish about ½ inch deep and take the pigs one at a time and stand in the dish. Then, if the pig is held firmly over the top of the neck, its head can be placed down into the milk, and held there long enough for it to get a taste of milk, but not long enough to allow it to inhale the milk. This operation may be repeated a few times at each feeding. After two or three such lessons the piglets will usually drink readily without assistance and afterwards will give little trouble. When the piglets are drinking well, the dish may be replaced by a shallow trough.

Both the dish and the trough used for holding the milk should be made of metal or earthenware and free of cracks so that they can be cleansed and scalded after each meal. This is most important for the prevention of digestive disorders.

Do You Keep Poultry?

if so——

You should secure a copy of the——

POULTRY BREEDERS' GUIDE & YEAR BOOK

Just Published

100 PAGES
Illustrated in COLOURS and BLACK AND WHITE.
Secure Your Copy Now,
1/2
Post free.

This valuable book of reference contains articles on the following subjects:—

LINE BREEDING, BROODING, INCUBATING, HOUSING, FEEDING, DISEASE CHART, TABLE POULTRY, CANDLING, EXPORT, LEADING BREEDS (illustrated in colours), etc.

Published by the
HORTICULTURAL PRESS PTY. LTD.
Box 1944, G.P.O. ***Melbourne***

MOTOR NOTES

CARE OF CLUTCH AND GEARBOX.

TO avoid trouble with the clutch and gearbox attention to details is necessary. There is an elementary rule concerning the clutch that, once it is engaged, the foot should be removed from the pedal.

The inch or two of fairly easy movement before the full resistance of the clutch spring is felt is put there deliberately, because within its range the forked member within the clutch bell housing is not in contact with the clutch throw-out bearing. It is only when the resistance of the main spring is felt that this fork connects with that bearing.

Effects of "Clutch-Riding."

If a motorist makes a practice of keeping his foot on the clutch pedal while driving—what is known as "riding the clutch"—this first inch or so of free movement will be taken up unconsciously, so that the withdrawal fork is all the time in contact with the withdrawal bearing.

That, in turn, places a certain weight on the bearing so that it is subjected to an unfair amount of wear. The natural consequence is the development, at an unusually early stage, of excessive looseness in that bearing, so that it rattles while the car is in motion. When that stage is reached, the only cure is the fairly expensive replacement of the withdrawal bearing.

Thus it should be noted that once the clutch is engaged the foot should be removed entirely and placed in a handy position to one side.

Regarding the gearbox: The early difficulty of gear-changing, particularly changing downwards, say from top to second or second to first, had to do with the necessity of meshing gear wheels rotating at different speeds.

As double declutch method of gear changing proved a hurdle which was very difficult for many beginners to surmount, manufacturers some years ago introduced into the gearbox design mechanism often known as "synchro-mesh," which automatically equalised the speeds of the gears to be engaged.

Two points about this must be remembered. Firstly, the gear lever needs to be moved fairly slowly in order to give the synchronising mechanism time to operate, and secondly, the mere fact of synchro-mesh being fitted does not free the driver from the obligation of accelerating the engine to make it compatible with the road speed of the car when the lower gear is engaged.

This should be done before the clutch is re-engaged after the change of gear downwards, and some judgment must be exercised in this process.

Mr. Psmith came home to lunch in a frightful temper. "It's no good!" he stormed, "I'm going to give that chauffeur notice. That's twice he's nearly killed me."

"Oh, darling," said his wife, "couldn't you give him another chance?"

Poultry Notes

SELECTING BEST COCKERELS.

Where it is desired to retain cockerels as stud birds for next season a selection should be made of the best of the birds hatched early in the season, instead of, as is sometimes done, marketing all the early birds and relying upon the later ones for breeders, states the N.S.W. Department of Agriculture Bulletin.

Those who are not experienced in the selection of birds should not make the mistake of retaining the precocious sorts, which appear the most vigorous at this stage, but should **choose those which are slower maturing but good in body size.** These will develop into better birds for the breeding pen than the "showy" types, which are more developed in the comb than the others.

In reserving cockerels it should be kept in mind that at least three or four times the number required should be saved because many will develop faults later which will render them unsuitable for breeding.

SMALL POULTRY FARM.

One Breed Profitable.

A common fault of many small poultry farmers is a never-satisfied desire to experiment with different breeds. Constant changing may be interesting if poultry is kept only as a hobby, but when profit is the first consideration it is advisable to stick to one pure breed where the small farmer is concerned.

If capital is limited, it is better to spend the money on fewer birds of better quality than to buy a large number of inferior type. This is the main point in purchasing breeding stock as a foundation, settings of eggs, or day-old chicks.

The latest method is one of the simplest ways of establishing a flock of poultry, but the chicks should be purchased from a reputable breeder.

Tasmanian News and Notes

Weather Conditions and Crop Prospects in the North and South — Effect of Commonwealth Government's Action and Advance on Tasmania — Necessity of Co-operation and Reduction of Costs of Distribution for Success.

(By Our Correspondent.)

IN THE NORTH of the State weather conditions changed from a little too wet to rather dry and warm with westerly winds, which caused the ground to dry rapidly, thus making cultivation hard.

Crop Prospects.

The setting of **Apples** appears to be good. **W.P.M.** appear quite up to the average. **C.O.P.** heavy; **Cleo.** good; **Jon.**, heavy in most parts; **Delicious**, medium, and **Dunn's** good.

The **Pears** appear to have suffered from a late frost and are only medium. **W.B.C.** are only fair, **B. Bosc** not quite up to average, **Packhams** good, **Winter Coles** light, and **Josephine** good. A little spot began to show up on Pears, but the changed weather conditions have checked it.

In the South weather conditions improved during November, in fact, certain soils baked so much that cultivation with horse implements became very difficult and rotary hoes were put on to break it up. On November 16 and 17 another good rain fell which eased the cultivation and promoted growth. In most places spraying has been done efficiently in spite of bad weather in October, and so far there is very little black spot showing on either Apples or Pears.

The setting of **Apples** appears to be up to the average. **Alfristons** and **Gravensteins** heavy, **C.O.P.** fair, **Cleo.** heavy, **Jonathan** patchy but fair average, **S.T.P.** good, and **Granny Smith** good and as additional trees are coming into bearing there should be considerably more than last year other varieties seem to have set well.

Pears are patchy: **Duchess** heavy, **B. Bosc** good, **Comice** fair, **Winter Cole** light, **E. Beurre** good, **Winter Nelis** patchy, and **Jos.** good. All varieties to date appear clean.

In wet places some Apple trees are seriously injured and a few will probably die.

Most growers have completed the **nicotine spray for the canary fly and red spider.** Where poisoned bandages were used for the moth they appear to have been effective.

Cherries in the Derwent Valley were affected by frost, but there seems to be a fair average setting elsewhere.

Berry fruits look well.

Vegetables are scarce, in fact, Potatoes are a luxury. However, the new ones are on the market now and crops look very well.

The outline of the **Government's proposals** for the assisting of the industry, as given in the November issue "Fruit World," is quite helpful in explaining the position. There is considerable disappointment at the smallness of the advance to be made, especially as it is only on 75 per cent. of the crop.

The exclusion of February from the operation of the pool seems to give Queensland and N.S.W. an advantage.

The success of the scheme will largely depend on information being supplied in time to allow all branches of the industry to co-operate as it will be necessary to make arrangements for supplies of case material, etc., well in advance.

The labor difficulty is going to be a problem, as unless a grower has plenty of notice when he is expected to supply fruit and how much, he will be in trouble. It is out of the question to keep a staff standing to attention on the chance of being instructed to deliver so much at a certain time. We must have our individual instructions well beforehand to enable us to do our part, and this is going to be rather difficult to arrange.

The expected increase in the Australian consumption will largely depend on being able to deliver at a reasonable price. Up to date the cost of distribution has been a controlling factor in limiting consumption, and unless a comprehensive scheme can be evolved so as to deliver to outlying districts at a reasonable price, the increase in demand will be disappointing. At present fruit is a luxury in the up-country places. Control of prices, both wholesale and retail, and the transport charges and commissions, will be necessary.

The administrative costs of the pool will also have to be watched carefully. We must expect a few anomalies, and hardship to individuals is inseparable from such a scheme, dealing as it does with such a diversity of conflicting interests — and a perishable article to handle.

It is to be hoped that all sections of the industry will realise the difficulties that the Board has to face and co-operate with them to make the scheme a reasonable success. It does seem unjust that although the whole crop is acquired by the Government and that the returns for factory fruit go into the pool that only 75 per cent. of the assessed crop is to receive the advance.

Two shillings per bushel on 75 per cent. of the crop is not sufficient to allow the growers to carry on properly, and as in all probability the mainland States will be called on to pack a bigger proportion of their crops owing, to less transport costs, they will benefit to a greater extent by receiving more of the labor costs.

On the whole it looks as though Tasmania will suffer most under the scheme, having no home market. The Tasmanian Government has endeavored to get the Federal Government to increase the advance to be paid, but so far without success. In reality, all the Federal Government is doing is to make an interest free advance for a month or two which is not sufficient to keep the industry going.

LEAF YELLOWING OF LETTUCE.

Conclusions drawn from experiments into the yellowing of Lettuce leaves in N.S.W. recently show that the stunting and chlorosis were probably caused by soil acidity associated with a deficiency of magnesium or calcium, or both. Whatever the exact cause, it was apparent that the condition was almost completely corrected by the addition of dolomite or lime at the rate of 1 ton per acre; moreover, **that it was necessary to add the lime or dolomite to the soil prior to planting.**

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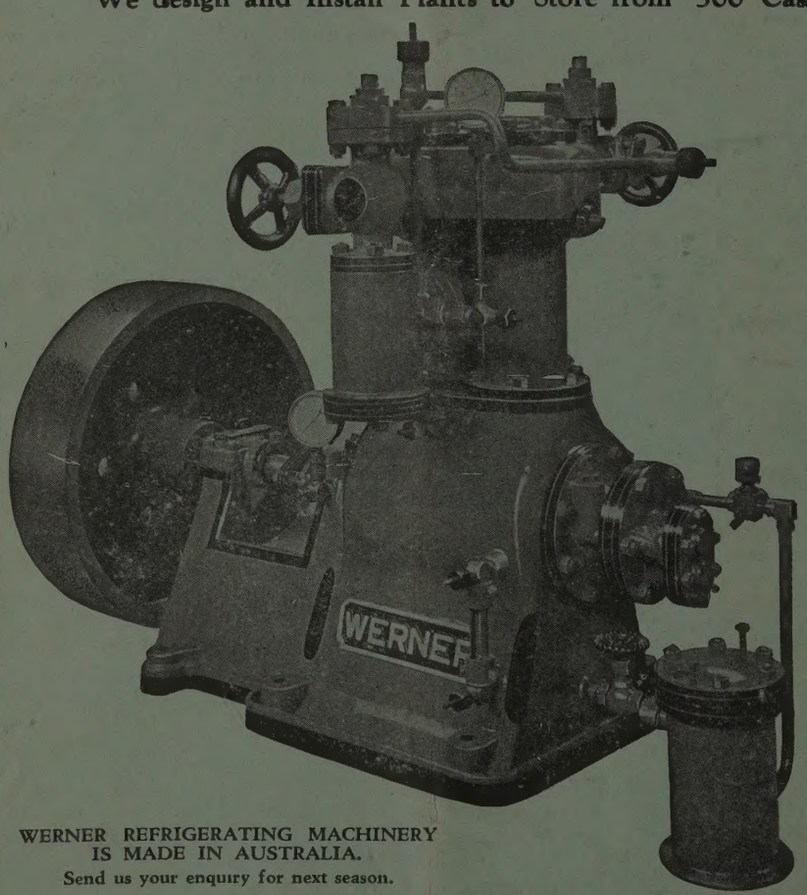

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